

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



A consumer satisfaction approach to acupuncture for oncology patients at an academic cancer center

Poster Board #: 75

Lanie Francis, UPMC; Karen Donoughe, UPMC

Purpose: A consumer satisfaction approach is employed for symptom-guided acupuncture in a population of oncology patients at an academic cancer center. **Methods:** Acupuncture was suggested by an oncologist for symptom management in the outpatient setting of an academic cancer center. All patients had a cancer diagnosis and experienced one or more of the following symptoms: pain, nausea, neuropathy, anxiety, insomnia, or hot flashes. Symptoms were typically refractory to pharmaceuticals or patients wanted to avoid additional pharmaceuticals due to side effects. Fundraising was employed so every patient could experience 3 one-hour sessions prior to deciding to pay a fee for service for ongoing acupuncture. **Results:** Over a 2-year period of time, 267 patients experienced acupuncture as recommended by an oncologist. The most common symptoms as reported by the patients and elicited by the oncologist were: pain, nausea, and neuropathy. Out of 267 patients who tried acupuncture, 46 continued for up to 3 additional treatments. This translates into over 17% that continued to pay for acupuncture services for their refractory symptoms in the context of a cancer diagnosis. **Conclusion:** A consumer driven principle of satisfaction can drive a medical acupuncture model. When patients experience acupuncture for refractory symptoms without the burden of cost, the commitment to pay for service represents demand. Quantifying this demand may help model return on investment and help expand the use of acupuncture as an integrative modality used with conventional medical practitioners. Given the complexity of defining the benefits to of acupuncture and integrative care to patients and society and limited insurance coverage, this is a practical approach to whole systems research.

A mixed methods study investigating acupuncture and health coaching on fall prevention in older adults

Poster Board #: 60

Carla Wilson, CIIS; Mirie Levy, CIIS; Tara Spalty, CIIS; Michel Lau, CIIS

1. This study seeks to examine the less commonly understood factors that influence falling in Seniors, with the hope of contributing to the scientific literature around effective preventive care for mitigating fall risk. While exercising is known to be one of the best ways to reduce fall risk, little research has been done on the impact of acupuncture and health coaching on fall prevention. The Balance Project investigates acupuncture's effectiveness in mitigating fall risk combined with health coaching techniques. 2. The research design utilized a Repeat Measures Design, also known as a Crossover Design, in which subjects serve as their own control groups. The study participants were randomly assigned into two groups, to receive either weekly acupuncture or weekly health coaching over the duration of 16 weeks (Phase I). Baseline testing was conducted prior to the start of the program and midtest assessments were administered after the first 16 weeks. After Phase I, the groups that had previously received acupuncture were exposed to a second treatment option, receiving health coaching along with acupuncture for an additional 16 weeks (Phase II). In order to collect qualitative data in addition to the quantitative assessments, focus groups were held at the end of the 32 weeks. 3. Collaboration with the Biostatistical Department at Emory University's School of Medicine is underway, and will provide data analyst to investigate the primary, secondary and exploratory research outcomes 4. Preliminary results from the study pilot will be available March 2019 and available to be presented at the 2019 SAR conference.

Sorted by abstract title



A novel correlation between electroacupuncture and the control of inflammatory pain: the role of pro-resolution mechanisms triggered by formyl peptide receptors

Poster Board #: 86

Daniel F. Martins, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Cintia Vieira, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Anna P. Piovezan, Postgraduate Program in Health Sciences, University of Southern Santa Catarina, at Palhoça, Santa Catarina, Brazil.; Daiana C. Salm, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Verônica V. Horewics, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Daniela D. Ludtke, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Aline A. Emer, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Júlia F. Koerich, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Gustavo Mazzardo, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Sayron Elias, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Leidiane Mazzardo-Martins, Postgraduate Program in Neuroscience, Center of Biological Sciences, Federal University of Santa Catarina, Florianópolis, Santa Catarina, Brazil; Francisco J. Cidral-Filho, Experimental Neuroscience Laboratory (LaNEx), University of Southern Santa Catarina at Palhoça, Santa Catarina, Brazil.; Ari O. O. Moré, University Hospital, Service of Integrative Medicine, Federal University of Santa Catarina - Brazil

Pro-resolution is a recently described endogenous process that controls inflammation. A type of formyl peptide receptor (ALX/FPR2R) is involved in this process and not yet studied in the acupuncture field. This study evaluated the correlations between the ALX/FPR2R and the antihyperalgesic effect induced by electroacupuncture (EA) in an animal model of persistent inflammatory pain. Method: Swiss male mice underwent intraplantar (i.pl.) injection with complete Freund's adjuvant (CFA). Mechanical hyperalgesia was assessed by von Frey test and paw edema was evaluated with a digital micrometer. Animals were treated with EA (2-10Hz, ST36-SP6) or subcutaneous BML-111 injection (ALX/FPR2R agonist) for 5 consecutive days. In another set of experiments, on the first and fifth days after CFA injection, animals received i.pl. and intrathecal (i.t.) WRW4 (ALX/FPR2R antagonist) or naloxone (non-selective opioid receptor antagonist) before EA or BML-111 treatment. Expression of the ALX/FPR2R in the paw and spinal cord was performed on the second day after CFA injection by the Western Blotting technique. Results: EA and BML-111 reduced mechanical hyperalgesia but did not inhibited paw edema. The i.pl. or i.t. pre-treatment of animals with WRW4 or naloxone prevented the antihyperalgesic effect induced either by EA or BML-111. The CFA injection increased ALX/FPR2R expression in the paw, but not in the spinal cord. Treatment with EA or BML-111 did not alter ALX/FPR2R expression in the paw or spinal cord. On the other hand, the group of animals pretreated with WRW4 that received BML-111 had lower ALX/FPR2R expression in the spinal cord and those that received EA had lower ALX/FPR2R expression in the spinal cord and the paw. Conclusion: The results of this study suggest a novel correlation between the EA antihyperalgesic effects and pro-resolution mechanisms. This seems to be triggered by the modulation of formyl peptide receptors and a cross-talk with the opioid system.

A pilot study of acupuncture augmentation of lidocaine for the treatment of provoked localized vulvodynia – an exploratory analysis of changes in pain based on Traditional Chinese Medicine (TCM) diagnosis

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Poster Board #: 21

Lee Hullender Rubin, Osher Center for Integrative Medicine, University of California San Francisco; Scott Mist, Oregon Health & Science University; Rosa Schnyer, University of Texas; Catherine Leclair, Oregon Health & Science University

Purpose: Assess acupuncture augmentation of lidocaine for the treatment of provoked, localized vulvodynia (PLV) pain based on Traditional Chinese Medicine (TCM) diagnosis. **Methods:** In a randomized, single-blind, controlled pilot over 12 weeks, 19 women with moderate to severe PLV pain were randomized to either 18 sessions each of classical acupuncture (CA) or non-classical acupuncture (NCA) and completed TCM diagnostic assessment. Women in the CA group received alternating sessions of manual or electro-acupuncture. The NCA group received minimal needling with no stimulation. All participants applied lidocaine 5% cream four times daily to the vestibule. Participants were assigned one of three TCM patterns: Qi and Blood stagnation in the Liver Channel (Stagnation); Fire in the Liver Channel (Fire); and Cold in the Liver channel engendering Fire (Cold). An exploratory aim was to estimate the relative frequency of TCM diagnosis and assess change in Tampon Test scores from baseline to Weeks 12 and 24, stratified according to TCM diagnosis. **Results:** The most common diagnosis was Fire (n=10), followed by Stagnation (n=6), then Cold (n=3). Follow up scores were obtained in 14 women at week 24. Five withdrew due to: lidocaine reaction (n=2); unable to insert tampon (n=1); started new medication (n=1), and change in vulvar diagnosis (n=1). Women diagnosed with Stagnation experienced a within group mean difference (MD) of -47.8 ± 20.7 at 12 weeks, and -45.4 ± 11.3 at 24 weeks. Women diagnosed with Fire experienced MD -41.2 ± 10.2 at 12 weeks, and -23.0 ± 14.1 . While women with the Cold diagnosis experienced MD 0.4 ± 19.8 at 12 weeks, and -41.0 ± 11.6 at 24 weeks. **Conclusions:** The most prevalent TCM diagnosis in women with PLV was Fire in the Liver Channel, but the pattern most responsive to treatment was Qi and Blood Stagnation in the Liver Channel.

A randomized wait-list controlled trial examining the effect of acupuncture for insomnia in breast cancer patients undergoing chemotherapy: a study protocol

Poster Board #: 67

Jialing ZHANG, School of Chinese Medicine, The University of Hong Kong; Mingxiao YANG, School of Chinese Medicine, The University of Hong Kong; Lam Wing LAM, School of Chinese Medicine, The University of Hong Kong; Haiyong CHEN, School of Chinese Medicine, The University of Hong Kong; Tsz Him SO, Department of Clinical Oncology, The University of Hong Kong; Lixing LAO, School of Chinese Medicine, The University of Hong Kong

Background: Studies suggest that chemotherapy is one of the major causes of insomnia in cancer patients. Acupuncture is widely used for insomnia. This study aims to examine whether acupuncture is effective, safe and feasible for alleviating insomnia in breast cancer patients undergoing chemotherapy. **Methods:** We plan to conduct a randomized, wait-list controlled, assessor-blinded clinical trial. Thirty patients with nonmetastatic breast cancer, who have insomnia onset after chemotherapy, will be randomly allocated to either acupuncture group or wait-list control group at a 1:1 ratio. The acupuncture group will receive acupuncture twice a week for 6 weeks in addition to routine care. The wait-list control group will receive routine care only. They will receive 12 sessions acupuncture after the waiting period. The primary outcome measurement will be Insomnia Severity Index. The secondary outcomes include Pittsburgh Sleep Quality Index, sleep diary, actiwatch, Functional Assessment of Cancer Therapy-Breast Cancer, and adverse events. Follow-up assessment will be performed at week 9 and 12. **Discussion:** This clinical trial will expand our knowledge about the effect, safety and feasibility of acupuncture for insomnia in breast cancer patients undergoing chemotherapy. The study findings will provide useful information for designing a larger clinical trial. **Ethics:** This study protocol has been approved by the Institutional Review Board of the University of Hong

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

Kong/Hospital Authority Hong Kong West Cluster (No. UW 18-526). Trial Registration: This trial is registered with ClinicalTrials.gov (ID: NCT03762694).



A Retrospective Acupuncture Chart Review in a Primary Care Clinic -within a Public Teaching Hospital

Poster Board #: 80

Byron Lu, *ACMC/Highland Hospital*; Tin Ngo, *University of California Berkeley*; Chase Waters, *ACMC/Highland Hospital*; Lyn Berry, *ACMC/Highland Hospital*; Gabrielle LeCompte, *ACMC/Highland Hospital*; Amy Matecki, *ACMC/Highland Hospital*

Objectives: (1) Assess the sociodemographic characteristics of patients seen in Highland Hospital K6 Adult Medicine Acupuncture Clinic. (2) Describe the implementation of paper chart documentation to Electronic Medical Records (EMR). (3) Demonstrate the feasibility of integrating Acupuncture practice in a primary care hospital setting. **Design:** Retrospective Descriptive Study. **Setting/Location:** Alameda Health System Highland Hospital, a public teaching hospital. **Subjects:** Patients were referred from all medical subspecialties between July 1, 2015, to June 30, 2016, to a 4-hour half-day clinic per week. **Intervention:** Acupuncture treatments were given to patients for pain management. All treatments were 30 minutes in length. **Outcome Measures:** Primary outcomes included sex, age, race, primary payer, Emergency Department visits and hospital visits. Secondary outcomes include a review of patient medications and Traditional Chinese Medicine (TCM) diagnoses and successfully transitioned from paper charts to NextGen (EMR). **Results:** 155 total patients were seen with a total of 442 treatment visits within a one-year period. Of the patients seen, 27.1% (N=42) male, 72.9% (N=113) female, the average age was 57. The average number of visits per patient was 2.9. African-American ethnicity represented the largest population subset at 37.4% (N=58) follow by Asian 17.4% (27) and White 16.1% (25), while those individuals identified as Other ethnicity represented 29.0% (N=45). The three predominate chief complaints were back pain 54.8% (N=85), lower extremity pain 53.5% (N=83), and neck/shoulder pain 27.7% (N=27.7). Top comorbidities were hypertension 14.3%, diabetes 10.3%, and arthritis 6.5%. There were no complications noted from Acupuncture treatments. **Conclusion:** Very diverse populations of patients were receptive to receiving Acupuncture for treatment of pain in a public safety net primary care setting. Conditions most commonly treated were pain from musculoskeletal conditions. EMR implementation was completed within the study period. Patients, clinical staff and referral services expressed their appreciation for the availability of this service.

A Retrospective Study of Acupuncture in the Emergency Department in a Public Safety Net Hospital

Poster Board #: 57

Yuwen Cen, *ACMC/Highland Hospital*; Byron Lu, *ACMC/Highland Hospital*; Scott Phelps, *ACMC/Highland Hospital*; Heidi Bartlett, *ACMC/Highland Hospital*; Tehea Robie, *ACMC/Highland Hospital*; Kara Romanko, *ACMC/Highland Hospital*; Cheng-Ping Butler, *University of California Berkeley*; Francis Yang, *University of California Berkeley*; Brandon Toy, *University of California Berkeley*; Teshu Teng, *ACMC/Highland Hospital*; Amy Matecki, *ACMC/Highland Hospital*; Gabrielle LeCompte, *ACMC/Highland Hospital*,

Objectives: Evaluate the acceptability and response to acupuncture in a safety net Emergency Department (ED). **Methods:** A retrospective descriptive study of ED patients who were referred for treatment to the Division of Integrative Medicine (DIM), Highland Hospital, between February 23, 2017, and February 23, 2018. Acupuncture effectiveness was measured through patient-reported, visual analog pain scales (VAS). Demographics, insurance,

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Traditional Chinese Medicine (TCM) diagnosis, and analgesics were also collected. Results: 109 patients received 111 treatments. Male patients comprised 46 (41%), female patients 63 (59%). Ethnicities included: African American 43 (40%), Caucasian 14 (12%), Hispanic American 12 (11%), Asian American 8 (7%), Pacific Islander 2 (2%) and other 30 (28%). Insurance coverage from three public, not-for-profit insurance companies: Alameda Alliance 34 (15%), Medical 68 (30%) and Medicare 49 (22%). The chief complaint of pain was categorized into five types: extremity pain, head/neck pain, back pain, abdominal pain (with/without nausea/vomiting) and chest pain. Some cases reported multiple pain. Most common TCM pattern diagnosis was qi and blood stasis, in 102 cases (94%). 104 cases reported pain; 81 (78%) VAS pain scores were recorded. Pain reduction in 69 cases (85%) with 12 (15%) indicated no pain reduction. No adverse events reported. Average pre-acupuncture pain score was 8.0 (variance 4.90). Average post-acupuncture pain score was 4.4 (variance 10.74), with pain reduction of 3.6 ± 0.57 (95% CI). Wilcoxon Signed-Rank tests show statistically significant pain reduction after acupuncture treatment. Conclusion: Our study, acupuncture was accepted by all ethnicities and covered by many types of insurance, in a safety net hospital ED. VAS pain score analysis indicated acupuncture was effective and well accepted by most patients for pain control. The significant reduction in VAS scores suggests that acupuncture might reduce the need for conventional analgesics as has been demonstrated in some prior studies.

A Review of Perioperative Acupuncture Outcomes in Pre-Surgery, O.R. Acupuncture Assisted Anesthesia, and Post-Surgery

Poster Board #: 63

Francis Yurasek, Director of Acupuncture; Lisa Seaman, Attending Acupuncturist

Acupuncture has been used in Stroger Hospital, Chicago, for the treatment of nausea and pain in Post Anesthesia Care Unit (PACU), in 2018, with 48 hour patient satisfaction survey follow-ups conducted by phone on a small representative number of patients. Pre-surgical patients have also been treated with acupuncture for pain, as well as a history of nausea. In addition patients are currently being reviewed for treatment with acupuncture pre-surgery, to prevent Bladder & Bowel retention issues, common particularly in older populations. The later group will be compared with outcomes following surgery with the same conditions who will not receive pre-surgical acupuncture. Finally, outcomes will be reviewed in a 2 arm randomized study of patients undergoing elective lumbar open surgery, using electro-acupuncture stimulation on preselected points, 30 patients chosen randomly to receive stimulation on verum points and 30 to receive stimulation on sham points. This last study will also be conducted at Gansu Hospital of Traditional Chinese Medicine PRC, on 120 patients randomly selected, using identical points, stimulated by identical acupuncture e-stim devices, at identical settings. The same exclusion criteria and suspension criteria will be used in both locations. Data will be collected and shared from both locations, and reviewed, for the possibility of bundling results from both studies, or using them as stand-alone studies of Acupuncture Assisted Anesthesia. Future studies are also being considered in Chicago to follow patients through pre-surgery, surgery, and post surgery using Acupuncture Assisted Acupuncture, to see how it might effect both the strength, dosage frequency, and length of usage time for pain medication on discharge.

Accessibility, Affordability and Viability of AOM in Primary Care: a Retrospective Cohort Study Protocol

Poster Board #: 64

Amelia Zahm, Oregon College of Oriental Medicine

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Background: While numerous studies demonstrate the effectiveness of acupuncture, there is little research examining the integration of AOM with primary care. The question arises, if AOM services are available in a primary care clinic, can AOM become an accepted, accessible, affordable treatment modality for all populations? **Objectives:** This retrospective analysis will investigate the implementation of AOM within a Patient Centered Primary Care Home (PCPCH) and Federally Qualified Healthcare Center (FQHC) located in a frontier community and will assess: 1) demographics of patients utilizing AOM services, 2) percentage of patients using commercial insurance, Medicaid, private payment or sliding fee scale, 3) financial viability, 4) patient and provider perceptions **Methods:** Primary objective data will be gathered from electronic medical records, health care billing files, and clinic financial documents. Qualitative data will be gathered from focus groups to determine levels of satisfaction and areas of challenge with regard to AOM services. **Expected Outcomes:** Objective and qualitative data will show how underserved populations benefit from fully integrated care, how medical and AOM providers collaborate to serve patients, and how primary care clinics offer AOM services in financially sustainable ways. The location and demographics of the study population will show positive outcomes and challenges of providing AOM services in a rural community, offer evidence that integrated care will benefit such populations, and suggest ways in which clinics might provide these services. **Conclusion:** This study will lay the groundwork for further study into the integration of AOM and primary care to improve patient outcomes, enhance patient experiences, and provide AOM services in affordable, accessible ways to underserved populations. Data will support the successful integration of AOM into other primary care sites, and inform the design of future prospective studies conducted in a variety of primary care settings, including other FQHC's in both rural and urban environments.

Acudetox Users in New Mexico – Demographic and drug use profiles of a sample of 7000+ acudetox users

Poster Board #: 31

Nityamo Lian, Public Health Acupuncture of NM; Pamela Arenella, UNM Dept of Psychiatry; Anna Ponce, Public Health Acupuncture of NM; Kristine Tollestrup, UNM College of Population Health

Intro Acudetox refers to the National Acupuncture Detoxification Association's (NADA) protocol of five ear acupuncture points used for the amelioration of symptoms due to alcohol or other drug use withdrawal. This presentation describes the demographic, substance-use, and risk factor profile for more than 7000 treatments given to clients in substance-use treatment and prevention programs associated with the non-profit organization Public Health Acupuncture of New Mexico (PHANM). **Methods** Staff of 23 programs operating at 32 sites in NM gave 7652 acudetox treatments between July 2017- June 2018. Staff were trained in the administration of a standardized client self-report form to collect demographic, drug use, and risk factor information monthly. For this study we used data collected from all programs in the four months of July and November 2017; January and April, 2018. **Results** 7652 treatments were given over 1671 clinic days. A sample of four months of patient treatment data resulted in the following profiles: Sex/Gender: 48.9% men, 50.8% women and 0.3% Transgender. Average age: 40.7 years; Range: 9-92 years Ethnicity: Hispanic 47.6%; White 17.3%; Native American 31.9%; African-American 2.3%; Asian American 1.5%; Other 3.4%; Multi-Ethnic 3.5% Substances of choice: Alcohol 54.5%; Tobacco 28.2%; Marijuana 28.1%; Heroin and Opiates 25.0%; Methamphetamine and Speed 26.9%; Cocaine/Crack 28.2%; Risk factors for substance use: A family member used 65.5%; Works with substance users 22.2%; Has health or mental health problems 36.4%; Has money or home problems 37.1%; is on disability 18.3%. Over a third of clients (38.6%) reported multiple substance use excluding tobacco and 51.1% reported multiple risk factors for substance use. **Conclusion** Acudetox clients in NM represent a diverse demographic with multiple substance use and risk factors for substance use. This population differs from the typical acupuncture client and should be included as a separate patient profile for acupuncture users.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Acupuncture alters primary somatosensory cortex functional connectivity in Carpal Tunnel Syndrome

Poster Board #: 17

Harrison Fisher, Department of Radiology, Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Charlestown, MA, USA; Yumi Maeda, Department of Radiology, Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Charlestown, MA, USA; Department of Radiology, Logan University, Chesterfield, MO, USA; Norman Kettner, Department of Radiology, Logan University, Chesterfield, MO, USA; Roberta Sclocco, Department of Radiology, Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Charlestown, MA, USA; 2Department of Radiology, Logan University, Chesterfield, MO, USA; Jieun Kim, Korean Institute of Oriental Medicine, Daejeon, Korea; Cristina Malatesta, Department of Physical Health and Rehabilitation, Spaulding Rehabilitation Hospital, Boston, MA, USA; Jessica Gerber, Department of Radiology, Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Charlestown, MA, USA; Joseph Audette, Department of Pain Medicine, Harvard Vanguard Medical Associates, Atrium Health, Boston, MA, USA; Vitaly Napadow, Department of Radiology, Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Charlestown, MA, USA; Department of Radiology, Logan University, Chesterfield, MO, USA

Our prior studies have shown that Carpal Tunnel Syndrome (CTS), an entrapment neuropathy of the median nerve, alters the brain's primary somatosensory cortex (S1), which electro-acupuncture, both local and remote/distal to the wrist, can modulate S1 somatotopy. However, the mechanisms linking neuroplasticity with improved outcomes are unknown. We investigated altered resting functional S1 connectivity and potential acupuncture modulation. Sixty-one (N=61) CTS subjects were randomized to local (N=19), distal (N=16, opposite ankle), or sham (N=20) acupuncture groups for 16 treatments over 8 weeks. Before and after the treatment, 6 minutes of resting fMRI was performed at 3T. Data for CTS, and N=27 healthy controls, were preprocessed with the CONN toolbox and Freesurfer. Connectivity analysis used contralesional seeds for median-nerve (index finger, D2; middle, D3) and ulnar-nerve innervated (pinky, D5) S1 representations, and contralateral S1 local/distal acupuncture-activated regions. Both D2 and D3, but not D5, seeds showed decreased resting connectivity to other S1 subregions for CTS compared to HC (pFDR<0.05), and were negatively correlated with pain scores (Pearson $r=-0.29$ and -0.30 for D2 and D3 seeds, respectively, $p<0.05$). After local acupuncture, connectivity increased between D3 and right S1, mid cingulate, and left insula (pFDR<0.05). Additionally, the S1 hand region activated by local acupuncture showed increased connectivity to ventromedial prefrontal cortex (vmPFC, pFDR<0.05). Similarly, after distal acupuncture, connectivity increased between the activated S1 ankle region and both left S1 and posterior cingulate cortex (PCC, pFDR < 0.05). Reduced intra-S1 connectivity was consistent with our previous studies for other chronic pain conditions. Acupuncture, either local or distal to the lesioned hand, increased S1 connectivity to the acupuncture-targeted S1 subregion. Additionally, acupuncture also increased S1 connectivity to different default mode network subregions, vmPFC and PCC, potentially modulating autonomic neurovascular control at the wrist.

Acupuncture and Traditional Chinese Medicine Online PROM Database: Pilot Study

Poster Board #: 38

Nick Lowe, Nanjing University of Traditional Chinese Medicine and Shulan College of TCM

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



This pilot study will test the design for an Acupuncture and Traditional Chinese Medicine Online PROM Database. It will record Patient Reported Outcome Measures (PROMs) of treatments in real life clinical settings. The primary goal is to record and analyse the effectiveness, cost effectiveness and safety of TCM based therapies for a wide range of health conditions. Additionally the database will record important patient health variables such as diet, exercise, sleep and stress levels. Contextual or 'non-specific' effects of treatments will also be measured including; practitioner style, techniques, experience level, the patient-practitioner relationship, lifestyle and dietary advice. The data will be collected online via a website using a variety of disease specific PROM questionnaires that will be recorded onto a secure database. The pilot study will test the website design, user interface, PROM questionnaire selection and design, analysis methods and practitioner user satisfaction. Electronic medical records (EMR) are the future of recording data for research in healthcare; Acupuncture and TCM therapies urgently need to keep up with these technological developments. EMR offer enormous potential for data collection and growth in TCM research at a relatively lower cost than RCT's. If the pilot study is successful the ACU TCM PROM Database will be made freely available for practitioners worldwide. This data could provide invaluable information for practitioners, teaching institutions, prospective patients, healthcare providers and insurers. We are looking for Acupuncturists and TCM practitioners to participate in the study. The database will be designed to benefit practitioners by providing access to an online, pre-validated outcome measure so they can more easily engage in research and record the results of their treatments. They may then have the option to publish their success rates as verified data helping to inform prospective patients and promote their practice.

Acupuncture Anesthesia for Labor and Delivery

Poster Board #: 82

Patricia Washington, Acupuncture Physicians Group

The purpose of this review is to examine the clinical effectiveness and efficacy of acupuncture anesthesia (AA) for labor and delivery, based on the hypothesis that the expanded intervention of AA is a superior integrative medical model for the treatment of labor and delivery pain, either as a replacement or adjuvant therapy with pharmacological anesthesia. The research methods consist of a systematic review that encompasses previous clinical trials, meta-analyses, literature reviews, and systematic reviews, from both Eastern and Western sources, 21 in total, pertaining to the application of acupuncture anesthesia (AA) during labor and delivery. Among the studies reviewed, (88%) affirmed the effectiveness of AA for labor pain, (80%) validated AA's ability to reduce the duration of labor pain, (83%) demonstrated that AA maternity patients required less anesthesia, and (92%) concluded that AA caused little or no harmful side effects. In conclusion, although more research is needed to formulate the full extent of the use of AA, the results imply that AA has strong potential to fulfill the role of a new integrative medical standard for the treatment of labor and delivery pain.

Acupuncture for Chemotherapy Induced Peripheral Neuropathy in Female Breast Cancer Patients - A Case Series

Poster Board #: 59

S. Prasad Vinjamury, SCU; Eric Hsiao, SCU; Lawrence Hsiao, SCU; Sue Mir, SCU; Jennifer Noborikawa, SCU

Background: Chemotherapy Induced Neuropathy is the most common neurologic complications of Chemotherapy. The long term disease burden of CIPN is increasing with increased cancer survival. It impacts the quality of life of a cancer patient to a greater extent Purpose: To collect preliminary data on the effectiveness and safety of verum

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



acupuncture in the treatment of CIPN in breast cancer patients. Methods: Research Design: Case Series Recruitment and sample size: A community wide recruitment of ten participants was done using a specific study eligibility criteria. Study was approved by the local IRB. Written informed consent was obtained from all participants. Intervention: A fixed protocol verum acupuncture was adopted with twice a week treatments for the first six weeks followed by once a week for 4 weeks. A total of 16 treatments were provided within ten weeks. Outcome Measures: Improvement in symptoms was tracked by administering EORTC-QLQ-CIPN20;2 and Visual Analog Scale at baseline, end of 6 weeks and 10 weeks. Data Analysis: Descriptive statistics was used to report demographics and percentage of improvement. Results: Ten female patients ages ranging from 49 to 74 were recruited. Nine completed the study and one patient will complete the study in the next two weeks. The percentage of improvement varied between 10 to 200%, indicating a moderate decrease in the sensory and motor subscales in all patients except one at the end of the study when compared to baseline per EORTC-QLQ-CIPN20. The overall symptom score started decreasing at the end of six weeks and continued to decrease further at the end of ten weeks. Conclusion: A fixed protocol acupuncture may be effective in reducing the symptoms of CIPN in breast cancer patients and improve overall quality of life. No serious adverse effects were reported indicating its overall safety.

Acupuncture for Chemotherapy-Induced Peripheral Neuropathy Among Breast Cancer Patients

Poster Board #: 3

Nancy Avis, Wake Forest School of Medicine; Remy Coeytaux, Wake Forest School of Medicine; Roy Strowd, Wake Forest School of Medicine; Alexandra Thomas, Wake Forest School of Medicine; Janet Tooze, Wake Forest School of Medicine

Chemotherapy-induced peripheral neuropathy (CIPN) is a common consequence of cytotoxic chemotherapies resulting in symptoms of numbness, tingling, burning and pain in hands and feet. CIPN occurs in up to 80% of cancer patients receiving taxane-based chemotherapy and is associated with lower self-reported physical function and quality of life. It may also contribute to chemotherapy dose reduction or discontinuation. CIPN is a small fiber neuropathy resulting in reduced nerve fiber density in the skin and can lead to physiologic changes in nerve conduction and anatomic changes in peripheral nerve anatomy. Acupuncture has been found to effectively treat other types of neuropathy, but only a few uncontrolled studies have examined acupuncture for CIPN. This presentation describes the design of a pilot study to obtain preliminary evidence evaluating acupuncture for reducing the severity and/or progression of CIPN. This study also investigates possible mechanisms such as impaired conduction along peripheral sensory nerves (assessed by nerve conduction studies, NCS), reduced intraepidermal nerve fiber density detected by skin biopsy, and nerve swelling on neuromuscular ultrasound to understand how acupuncture works in treating CIPN. We are recruiting 24 breast cancer patients receiving taxane-based chemotherapy who have grade 1 or 2 neuropathy, as measured by the NCI Common Toxicity Criteria. Participants are randomly assigned to receive 8 acupuncture treatments or usual care (UC) over 10 weeks. Study outcomes include patient reported neuropathic pain, preventing the escalation of CIPN to a higher grade, and the amount and intensity of planned chemotherapy relative to completed chemotherapy. We are performing NCS, peripheral nerve ultrasound, and skin biopsies to assess whether reducing the severity of patient-reported CIPN symptoms is associated with improved objective measures of nerve function. Assessments are conducted prior to randomization and 10 wks. post baseline. Participants assigned to UC receive 4 acupuncture treatments following their week 10 assessment.

Acupuncture for pain management provided by family medicine residents in Southern Brazil

Poster Board #: 6

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Ues Bruna, Family Medicine Residency Program - Secretaria Municipal de Saúde de Florianópolis; Ari O. O. Moré, Federal University of Santa Catarina - Integrative Medicine and Acupuncture Service; Marina P. Galhardi, Family Medicine Residency Program - Secretaria Municipal de Saúde de Florianópolis; Charles D. Tesser, Federal University of Santa Catarina - Department of Public Health; Min S. Li, Federal University of Santa Catarina - Department of Internal Medicine

Background: In Southern Brazil family medicine residents receive 80 hours of acupuncture training during the residency program to acquire basic needling skills for pain management. **Objective:** To describe the use of acupuncture on patients with chronic pain in a primary care service in southern Brazil. **Method:** This is a cross-sectional observational study conducted from May 2017 to July 2018 that included patients with chronic pain in primary care treated by two family medicine residents who underwent the acupuncture training. Pain intensity was evaluated with the Visual Analogue Scale (VAS). Unexpected changes in health status was assessed by Likert scale and a questionnaire about the reasons to abandon the treatment was applied to patients who did not complete the minimum of six sessions proposed. The patient's demographic data, acupuncture points used, number of sessions and prescriptions were collected from the medical record. **Results:** During the study period 47 chronic pain patients started acupuncture treatment, eight of them (17%) completed six or more sessions and 35 (74.4%) have had five or less. Seven out of eight patients who completed the treatment had moderate-severe pain (VAS = 4 to 10) at the beginning and six of them had a reduction to mild pain (VAS = 0 to 2) after the sessions. Seven out of eight patients reported unexpected changes during the treatment, like sleep improvement and anxiety decrease. Among the 35 patients who did not complete six sessions, 25 answered post-treatment questionnaires. The main reasons for discontinuation were work schedule and symptoms improvement. **Conclusion:** Patients with chronic pain treated with acupuncture in primary health care had their pain intensity score decreased, however only a small proportion of them completed the minimum of six sessions proposed. The reasons for patients dropping out the treatment are mainly labor issues and the improvement of pain symptoms.

Acupuncture for patients with degenerative lumbar spinal stenosis: a parallel multicentre pragmatic randomised controlled trial – a study protocol

Poster Board #: 25

Kun Hyung Kim, Department of Acupuncture & Moxibustion Medicine, Pusan National University Korean Medicine Hospital, Yangsan, South Korea; Jung Eun Kim, Department of Korean Medicine, Pusan National University Hospital, Pusan, Korea; Ji Won Choi, Department of Acupuncture & Moxibustion Medicine, Pusan National University Korean Medicine Hospital, Yangsan, South Korea; Seo Young Choi, Department of Acupuncture & Moxibustion Medicine, Pusan National University Korean Medicine Hospital, Yangsan, South Korea; Eun Young Bae, College of Pharmacy, Gyeongsang National University, Jinju, Korea; Myeong Soo Lee, Clinical Reserach Division, Korea Institute of Oriental Medicine, Daejeon, Korea; Gi Young Yang, Department of Acupuncture & Moxibustion Medicine, Pusan National University Korean Medicine Hospital, Yangsan, South Korea; Byung Ryul Lee, Department of Acupuncture & Moxibustion Medicine, Pusan National University Korean Medicine Hospital, Yangsan, South Korea

Background This study aims to investigate the effectiveness, safety and cost-effectiveness of acupuncture combined with usual care compared to usual care alone in patients with degenerative lumbar spinal stenosis (LSS). **Methods** This is a parallel multi-centre pragmatic randomised trial. A total of 180 participants with degenerative LSS with moderate level of discomfort of back or leg at least 3 months ago, neurogenic claudication and radiological evidence of LSS will be recruited. Participants will be randomised into acupuncture combined with usual care group versus usual care only group via a 1:1 ratio, computer-generated randomisation scheme. Allocation concealment is being

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



secured using opaque-sealed envelope methods. Participants and practitioners remain unblinded to group allocation results as this is an open-label pragmatic trial. Assessor-blinding will be maintained. Twelve to twenty sessions of acupuncture will be offered over 3 months in the acupuncture group. Participants in both groups will receive their usual care. Primary outcome is a back-specific dysfunction measured by the Oswestry Disability Index at 3 months from baseline. Secondary outcomes include pain and discomfort in back and leg, self-reported pain-free walking distance, quality of life measured by EQ-5D, use of additional healthcare resources to relieve symptoms of LSS and patient's satisfaction to treatment measured up to 1 year from baseline. Cost-effectiveness analysis will also be conducted. Ethics and Dissemination The trial was approved by the local ethic committees, and participants are now being recruited at two study centres. Study characteristics and the progress of trial will be presented at the conference.

Acupuncture for Postoperative Pain after Abdominal Surgery for Gynecological Diseases: a Randomized Sham-controlled Trial

Poster Board #: 29

Wing Lok LAM, School of Chinese Medicine, The University of Hong Kong, the HKSAR, China; WF Yeung, School of Nursing, The Hong Kong Polytechnic University, HKSAR, China; YS Ngan, Department of Obstetrics and Gynaecology, The University of Hong Kong, the HKSAR, China; KL Chan, Department of Obstetrics and Gynaecology, The University of Hong Kong, the HKSAR, China; WS Ma, Department of Obstetrics and Gynaecology, The University of Hong Kong, the HKSAR, China; WC Leung, Department of Obstetrics and Gynaecology, Kwong Wah Hospital, the HKSAR, China; TW Leung, Department of Obstetrics and Gynaecology, Kwong Wah Hospital, the HKSAR, China; CW Cheung, Department of Anaesthesiology, The University of Hong Kong, HKSAR, China; TC Liu, Department of Anaesthesiology, Kwong Wah Hospital, HKSAR, China; KH Wong, Department of Family Medicine and Primary Care, The University of Hong Kong, the HKSAR, China; F Jiang, Department of Statistics and Actuarial Science, The University of Hong Kong, the HKSAR, China; JX Wang, Department of Statistics and Actuarial Science, The University of Hong Kong, the HKSAR, China; HY Chen, School of Chinese Medicine, The University of Hong Kong, the HKSAR, China; LX Lao, School of Chinese Medicine, The University of Hong Kong, the HKSAR, China

Purpose To evaluate the efficacy of acupuncture compared with sham acupuncture as adjunct treatment in relieving pain in 5 days after laparotomy. **Methods** Seventy-two patients pending for laparotomy were recruited for this randomized sham-controlled, patient- and- assessor-blind trial from October 2016 to November 2018 in Hong Kong. Patients received either acupuncture (n = 36) or non-invasive sham acupuncture (n = 36) preoperatively (1 session) and postoperatively (once a day, up to 6 sessions). The primary outcome was pain at rest in 5 days after surgery. **Results** Among 72 randomized patients, 4 dropped out and all of them were included in the analysis. As more patients received horizontal incision in acupuncture group and percentage of missing data was high in 20/30 assessment time points, planned comparison on area under the curve (AUC) of pain between 2 groups was not appropriate. Regression model was used to adjust for the imbalance in incision type. Pain at rest at each time points with most available data (baseline, 22 hrs and 96 hrs) was compared between groups. Acupuncture group had lower pain score at rest at 22hrs when compared to sham control (Linear regression, $p < 0.05$). No serious adverse event was found. **Conclusion** Perioperative acupuncture treatment is safe and feasible but further study is needed to confirm the effect.

Acupuncture in Postoperative Pain Management – A Systematic Review and Meta-analysis

Poster Board #: 28

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Wing Lok LAM, School of Chinese Medicine, The University of Hong Kong, Hong Kong, China; Yingke ZHAO, School of Chinese Medicine, The University of Hong Kong, Hong Kong, China; Haiyi WANG, School of Medicine, Shanghai Jiaotong University, Shanghai, China; Jinglan MU, Department of Anesthesiology, Nanfang Hospital Southern Medical University; Jialing ZHANG, School of Chinese Medicine, The University of Hong Kong, Hong Kong, China; Marcos HSU, Center for Integrative Medicine, School of Medicine, University of Maryland; Wing Fai YEUNG, School of Nursing, The Hong Kong Polytechnic University, Hong Kong, China; Haiyong CHEN, School of Chinese Medicine, The University of Hong Kong, Hong Kong, China; Lixing LAO, School of Chinese Medicine, The University of Hong Kong, Hong Kong, China

Purpose To determine the efficacy of acupuncture when compared with sham acupuncture in controlling postoperative pain. **Methods** Databases searched from inception to Mar 2018, included AMED, CINAHL, CNKI, EMBASE, MEDLINE, PubMed, The Cochrane Libraries and Wan Fang. Search terms including “acupuncture”, “postoperative” and “pain” were used to find randomized control trials (RCTs) in acupuncture for adult postoperative pain. The Cochrane Collaboration’s tool, Jaded scale were used in quality assessment. Subgroup analyses were done based on surgery types and acupuncture parameters. **Results** More than 60% of the studies had low risk of bias in 10 out of 13 categories of the Cochrane tool and over 50% of the studies got at least 4 points on the Jaded scale. Acupuncture was shown to be useful in decreasing pain intensity by 8 hours, 24 hours and 72 hours after operation and reducing morphine consumption by 24 hours after surgery. However, the results must be interpreted with caution as with heterogeneities in outcome measurement tools and timepoints, only 11 studies in pain and 6 studies in analgesic consumptions were included in meta-analyses. **Conclusion** To conclude, acupuncture is potentially useful in postoperative pain management. More high-quality clinical trials are warranted to confirm the findings.

Acupuncture point: One form of neurogenic inflammation in skin

Poster Board #: 85

Yu Fan, 1College of Korean Medicine, Daegu Haany University, Daegu 42158, South Korea; Do-Hee Kim, 1College of Korean Medicine, Daegu Haany University, Daegu 42158, South Korea; Yeonhee Ryu, 2Acupuncture, Moxibustion& Meridian Research Center, Division of Standard Research, Korea Institute of Oriental Medicine, Daejeon 34054, South Korea; Hee Young Kim, 1College of Korean Medicine, Daegu Haany University, Daegu 42158, South Korea; Soo Min Lee, 1College of Korean Medicine, Daegu Haany University, Daegu 42158, South Korea; Danbi Ahn, 1College of Korean Medicine, Daegu Haany University, Daegu 42158, South Korea; Yoo-Jung Yi, 1College of Korean Medicine, Daegu Haany University, Daegu 42158, South Korea; Suchang Chang, 1College of Korean Medicine, Daegu Haany University, Daegu 42158, South Korea

Acupuncture stimulates specific but poorly defined sites called acupoints. Oriental medicine describes how each acupoint communicates with a specific visceral organ; an acupoint reflects the status of a visceral organ and visceral disorders can be treated by manipulating acupoints. Until now, no unique anatomical structures of acupoint have been found. On the other hand, noxious sensory signals from visceral organs produce hypersensitive spots on the skin (neurogenic spots), caused by cutaneous neurogenic inflammation, in the dermatome that overlaps with visceral afferent innervation; the spots can be visualized experimentally on the skin by extravasation of Evans blue dye. Here, we show that an acupoint is one form of neurogenic inflammation on the skin. Various studies have demonstrated that acupoints show mechanical hypersensitivity and have high electrical conductance. Stimulation of acupoints produces needling sensations caused by activation of small afferent fibers and therapeutic effects on the associated visceral organs, likely due to the release of endogenous opioids. The present study provides experimental

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



evidence that neurogenic spots exhibit all the characteristics of the acupoints listed above. In addition, the stimulation of neurogenic spots by electrical, mechanical, or chemical means alleviated pathological conditions in rat colitis and hypertension models via endogenous opioid systems. Blocking NK1R in neurogenic spots prevented the acupuncture effects. Elevated substance P and CGRP caused low electrical resistance in neurogenic spots as well as acupoints. Our results demonstrate that an acupoint is identical to a neurogenic inflammatory spot on the skin, which is produced by activation of somatic C-fiber terminals in abnormal conditions of visceral organs.

Acupuncture utilization profile among primary care physicians working in the Brazilian public healthcare system

Poster Board #: 4

Fernanda Bedin, Family Medicine Residency Program - Secretaria Municipal de Saúde de Florianópolis; Ari O. O. Moré, Federal University of Santa Catarina - Integrative Medicine and Acupuncture Service; Jardel C. de Oliveira, Family Medicine Residency Program - Secretaria Municipal de Saúde de Florianópolis; Charles D. Tesser, Federal University of Santa Catarina - Department of Public Health; Min S. Li, Federal University of Santa Catarina - Department of Internal Medicine

Background: In Brazil complementary and integrative medicine training is offered to primary care doctors in different settings. Since 2011, an acupuncture introductory course (80h) is offered in Southern Brazil for family medicine physicians and residents. **Objective:** To analyze the acupuncture utilization profile of primary care doctors who completed an acupuncture introductory course in the period of 2011 to 2018. **Method:** Electronic questionnaire was sent for 119 physicians who completed the course. **Results:** 33 doctors answered the questionnaire. 48.5% were in the range of 23 to 30 years of age, 72.7% were women, and 84.8% participated in the course during the medical residence. 87.8% reported the use of acupuncture on spontaneous and scheduled patient demand in the public health system. The most used principles of acupoint selection were point function (72.2%) trigger-point needling (72.2%) and points protocols (63.6%). As obstacles for integrating acupuncture, 75.8% described time limitation, 69.7% non-proper physical space. As facilitators for integration, participants described clinical resoluteness (81.8%) and patient acceptance (81.8%). The most common treated problems were musculoskeletal pain (100%) and mood and anxiety disorders (97%). 81.8% of the participants described a reduction of referrals to specialists and 90.9% decreased their pain medication prescription, 46.9% did not noticed reduction of exams request. Most of the doctors (87.9%) answered that usually combine acupuncture with other medications and 78.8% associate other complementary practices. No serious adverse events were reported and the main adverse event, described by 51.5% of the participants, was vascular traumatism. **Conclusion:** Most of the primary care doctors who completed the introductory course and responded the survey are still using acupuncture in their daily practice, mainly for the management of musculoskeletal and mental health conditions. These doctors also described no serious acupuncture-related adverse events, less specialist referrals and less pain medication prescription after learning basic acupuncture skills.

An overview of studies on the working mechanism of fire-needle therapy

Poster Board #: 94

Jinyi Liu, School of Acupuncture-Moxibustion and Tuina, Beijing University of Chinese Medicine; Baixiao Zhao, School of Traditional Chinese Medicine, Beijing University of Chinese Medicine; Rui He, School of Acupuncture-Moxibustion and Tuina, Beijing University of Chinese Medicine

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Fire-needle therapy involves the use of thick or thin needle made of special material which is first burned on fire, then inserted to certain points or positions of the body and withdrawn rapidly. This therapy has proven to be of some benefits and has a history of over one thousand years. After generations of theoretical research and clinical practice and constant development and improvement, the fire-needle therapy has evolved into a unique treatment system in the field of acupuncture. In recent years, the fire-needle therapy has been widely used in gynaecology, neurology, dermatology, orthopaedics and traumatology, respiratory medicine and surgery. It has been proven effective in the treatment of hysterymyoma, mammary gland hyperplasia, herpes zoster, acne, rheumatoid arthritis, asthma and facial paralysis. This therapy is worthy of clinical application. Studies on the working mechanism of the fire-needle therapy as one of the external treatment in traditional Chinese medicine have also made some progress. The working mechanism mainly includes the following aspects: A high level of stimulation regulates the human pain system and excites the second dominant focus; an thermal effect improves blood circulation and local metabolism; changes in the properties of local tissues caused by burning helps improve local microenvironment and eliminate inflammatory factors; mechanical stimulation offered by the needle and mild thermal stimulation by moxibustion excite the polymodal receptor and activate the immune system. Now we search the studies about the working mechanism of fire-needle therapy using modern techniques and methodologies in the past 10 years, classify and describe separately for each class by using the language of modern medicine , so as to provide reference for future studies on the clinical effect and working mechanism of fire-needle therapy.

An overview on how physicians practice acupuncture and integrate it in a conventional medical system

Poster Board #: 14

Raluca Dăuș, Medical student at Carol Davila University of Medicine and Pharmacy, Bucharest; Ștefan Costescu, Romanian Society for Traditional Chinese Medicine; Iuliana Raluca Gheorghe, Senior Lecturer - Health care, Marketing and Medical Technology department at Carol Davila University of Medicine and Pharmacy

This is a survey-based, cross-sectional, pilot study about the way physicians practice acupuncture and integrative medicine as part of a conventional medical system. The 45 items questionnaire was conceived based on the experience drawn from daily practice. It was administered via an emailed online platform. It was answered by 38 physicians from the entire country, having different levels of medical and acupuncture education. Statistical correlations were analyzed using the chi square test and a $p < 0,05$. Three themes were followed: communication with physicians from the conventional system (collaborative attitude, efficient ways to communicate, barriers in communication), integrative practice, and involvement in the medical management of the cases. Additionally we investigated the influence of the experience in acupuncture practice on the three aspects. Doctors who have been practicing acupuncture for more than 10 years: are using more often the complementary and conventional methods of treatment together for the same patient ($p < 0,05$), are also using more frequently more than one complementary treatment method for the same patient ($p < 0,05$). They are also treating more patients with neoplastic diseases ($p < 0,05$). Acupuncture-physicians with a higher intention to collaborate with their colleagues in the conventional system consider that the most efficient way to communicate is face-to-face. They also considered as one of the main barriers to communication the fact that the medical information they provide will be ignored or neglected ($p < 0,05$). 76,3% of the respondents use the information they receive from conventional doctors for the general medical management of their cases ($SD=0,43$). In the format where acupuncture is being practiced by medical doctors we found that most of them have an integrative approach to their patients and are involved in the case management within the conventional medical system. Communication with the conventional medicine doctors needs in depth research for finding ways to improve it.

Sorted by abstract title



Analysis of the effect on three-circle standing qigong's function of psychosomatic balance on college students' suffer from spinal imbalance

Poster Board #: 40

Jia xuan Lyu, first author; Yu long Wei, corresponding author

PURPOSE This research is under practice of three-circle standing qigong, to analyse the change of spinal vertebra cords in straight standing position and the rebalance of EEG power, to provide theory about three-circle standing's function of coordinate to mind and body. **METHOD** Research bring into 50 university students, 16 male, 34 female. Experiment group were practiced three-circle standing, compared with wait list control group. The equipments are Switzerland Idiag's Spinal Mouse and American Neuro scan record and analysis system. Straight standing spinal vertebra cords and EEG are taken and make static by SPSS20.0 software, to compare the data before and after intervene. **RESULTS** 1. The compare of spinal vertebra cords before and after 4 weeks of three-circle standing practice. Male and female shows no difference on spinal vertebra cords, while thoracic vertebra and lumbar vertebra are biologically different. The result shows that experiment groups' spinal vertebra cords significantly decreased ($P < 0.05$), at the same time, same trend didn't show in control group ($P > 0.05$). During whole experiment, T5-T7 and T9-T11 vertebra and No.3 lumbar vertebra's cords (L3) stayed still, we presumed that these vertebra cords are the points of strength in upper and lower back. 2. EEG result shows that experiment group's brain acting much more relaxed after three-circle standing practice, α and β belt's power raised, and moving to the front of head. Represents experiment group's much more awakened. Electroencephalogram show that the function of left and right side of brain get rebalanced, same happened to frontal and occipital region. Whole brain's power get more strong and balanced than before. Control group's EEG change suggests desynchronization, δ belt's power has been raised. **CONCLUSION** 4 weeks of qigong practice could rebalance structure of spinal vertebra and brain in both coronal and sagittal planes. Brain coordinate and synchronicity functions are enhanced.

Anxiety related to De Qi psychophysical responses as measured by MASS: A sub-study embedded in a multisite randomised clinical trial

Poster Board #: 51

Shohreh Razavy, University of Technology Sydney

Acupuncture has been broadly applied in the management of many diseases and conditions; however, its mechanism of action has been partially elucidated. Additionally, assessment of psychophysical responses in the acupuncture therapy is not common regarding anxiety disorder studies. Taken together, the therapeutic effect of acupuncture appears when De Qi psychophysical response is experienced following stimulation of the afferent sensory nerves. The present study investigates the level of anxiety perceived at different occasions in acupuncture and mock laser group. Furthermore, it examines the relationship between perceived De Qi psychophysical response and the level of anxiety experienced during administration of each intervention. The study was embedded in a two-arm parallel design multi-center, randomized clinical trial, the Tennis Elbow Acupuncture-International Study-China, Hong Kong, Australia, Italy. Participants' level of anxiety was measured using a validated instrument, the Massachusetts General Hospital Acupuncture Sensation Mood Scale. Ninety-six participants with Lateral Elbow Pain were randomly allocated into two groups; the acupuncture treatment group ($n=47$) and the inactive mock laser control group ($n=49$). Data were collected immediately following the interventions at the first and the ninth session within the clinical trial. Acupuncture with De Qi did not induce higher level of anxiety compared to prior

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



administration of acupuncture. In fact, participants were more relaxed after receiving acupuncture than those who received mock laser. There was also a weak association between participants' perception of anxiety during acupuncture and the MASS De Qi Index in session nine only ($p < 0.01$). Further investigation of the result revealed weak positive correlation between anxiety perceived during administration of acupuncture and the following De Qi characteristics; 'soreness' ($p < 0.01$), 'Deep pressure' ($p < 0.05$), 'Heaviness' ($p < 0.05$), and 'Fullness/distension' ($p < 0.05$). Acupuncture can be regarded as a potential therapy for preoperative anxiety through its possible regulatory function of emotion. While culture may not alter the expectation of the individual regarding anxiety, symptomology associated with anxiety should be understood within the context of the cultural background.

Auriculotherapy and Physiotherapy in Tension Neck Pain Analgesia: a Comparative Study

Poster Board #: 55

Sandra Silverio-Lopes, IBRATE Technological College; Carolina Greven, IBRATE Technological College; Lirane Carneiro-Suliano, Federal University of Parana; Maria Jorge, Federal University of Parana; Sandriane Martins, Shanti Institute

Context: Chronic cervicgia is a painful syndrome, characterized by pain in the cervical spine and shoulders regions. It can be caused by several factors, and present chronic and acute phases. It is considered the most prevalent muscular pain syndrome in the population, demanding all forms of treatment: medication, surgery, physiotherapy, electrotherapy, acupuncture and auriculotherapy. **Objective:** To compare the analgesic effect of auriculotherapy and conventional physiotherapy for chronic cervicgia. **Method:** Twenty volunteers, both genders, aged between 24 and 55 years (mean of 40.5 years) were selected, presenting clinical diagnosis of chronic cervicgia for at least one month. The following were not included: individuals with cervical or thoracic disc hernia, submitted to physiotherapy, massage, acupuncture in the last five days or who used analgesics or anesthetics during the same period. Volunteers were divided into two groups with 10 subjects each. One group was submitted to six sessions auriculotherapy, and the other, to six sessions of physiotherapy. The auriculotherapy group used Vaccaria seeds in the following points: shen men, kidney, autonomic nervous system, cervical vertebrae, analgesia, according to the acupoints map suggested by Silvério-Lopes & Suliano (2018). The physiotherapy group used TENS, pulsed ultrasound and infrared light. Results were evaluated using the mean of the variation of pain (after and before therapy) using the VAS scale. **Results:** The auriculotherapy group showed 67% reduction in pain intensity, whilst, the physiotherapy group showed 44%. **Conclusion:** This work suggested that both, auriculotherapy and physiotherapy, were efficient for the treatment of chronic cervicgia. However, auriculotherapy was 23% more efficient than physiotherapy, besides being more practical and economical.

Auriculotherapy as an alternative method for the treatment of phantom pain in amputees

Poster Board #: 53

Reginaldo Silva-Filho, Faculdade EBRAMEC; Paulo Oliveira, Faculdade EBRAMEC; Maria Cecília Baroni, Universidade Santa Cecília

Introduction: Phantom pain is a very common symptom after amputation and auriculotherapy can present important results on such condition. **Objective:** Evaluate the analgesic effects of auriculotherapy on specific points, in the treatment of phantom limb pain in amputees, compared to standard therapy. **Methods:** Ten individuals were treated once a week for ten weeks, in the clinic of physiotherapy of UNISANTA (Universidade Santa Cecília). The individuals were distributed randomly in Desensitization Group (DG): standard therapy and Auriculotherapy Group (AG): experimental technique. The DG received desensitization on the participant's amputated limb, with: sponge,

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



flannel, cotton, gauze, brush, etc., always from the enjoyable to the less pleasant, uninterruptedly, for twenty minutes. The AG received auriculotherapy with synthetic mat seeds of Wang Bu Liu Xi (Cousa or Vaccarine), which were placed with the aid of tweezers, on the following acupoints: corresponding zone (ex: arm, leg, toes), Shen Men, sub-cortex, lesser occipital nerve and neurasthenia point. The pain was measured by Visual Analog Scale (VAS) and by McGill pain questionnaire, before and after treatment. Results: In self-analysis of the AG and DG (pre and post intervention), a statistical difference was observed. In the analysis between groups, there was no significant difference between pre and post intervention of the groups, however in the analysis of McGill - Descriptors variable (post intervention) there was a significant difference of ($p=0.044$) among groups. Conclusion: Auriculotherapy obtained satisfactory results in resolution of phantom pain, and according to the participants, this technique was faster than desensitization, which also proved effectiveness in this case. However, comparing the therapies, there was no statistical difference between them.

Auriculotherapy in the Treatment of Fibromyalgia: Evaluation of the Consumption of Analgesics and Anti-inflammatory Drugs

Poster Board #: 56

Sandra Silverio-Lopes, IBRATE Technological College; Fernanda Anjos, Secretaria Municipal de Saude de Perola; Lirana Carneiro-Suliano, Federal University of Parana; Maria Jorge, Federal University of Parana

Context: Fibromyalgia is one of the Non-Transmissible Chronic Diseases (NTCD), included in the priority policies of the Brazilian Health Ministry. Its treatment deserves special attention, finding in Complementary Alternative Medicine (CAM) a qualified support. Auriculotherapy is one of the practices that can be used in public health system, because it is easy and cheap to implement. Thus, it is very important to evaluate the efficiency of this CAM in the public health system routine. Objective: To evaluate the analgesic effect of auriculotherapy for the treatment of fibromyalgia, and the consumption of analgesics and anti-inflammatory drugs. Method: Thirteen women, aged between 38 and 64 years, clinically diagnosed with fibromyalgia were selected. They agreed to try to discontinue analgesic and anti-inflammatory drugs under medical supervision. Patients received Vaccaria seeds in one auriculotherapy session a week, for eight weeks. The auricular points selected were: shen men, kidney, autonomic nervous system, analgesia, muscle relaxation, sub-cortex and local pain points. The map for acupoints location was suggested by Silvério-Lopes & Suliano (2018). The pain was evaluated by the Visual Analogical Scale (VAS) and the McGill Pain Questionnaire. The return of medication use was registered by the outpatient health team. Results: The use of analgesic/anti-inflammatory drugs was 76.81% lower when compared to the same period without auriculotherapy. Accordingly, VAS was reduced by 39.2% and the McGill Pain Questionnaire showed a decrease of 48.62%. Conclusion: The decrease of drug use among the subjects treated with auriculotherapy was remarkable. However, the reduction of pain perception by the VAS scale was not so expressive. Auriculotherapy is an easy-to-apply and effective CAM method, capable of reducing the cost of fibromyalgia treatment in the public health system.

Biological basis of acupoints sensitization and meridian signal transduction: key role of Kininogen-Nitric Oxide-MLC Pathway

Poster Board #: 91

Ting Wang, Kao (China) Research & Development Center; Geng Zhu, Bio-X Institutes, Shanghai Jiao Tong University; Liyue Qin, Kao (China) Research & Development Center; Dongsheng Xu, Institute of Acupuncture and Moxibustion, China Academy of Chinese Medical Sciences; Wanzhu Bai, Institute of Acupuncture and Moxibustion, China Academy of

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

Chinese Medical Sciences; Koichi Ishida, Kao (China) Research & Development Center; Shengtian Li, Bio-X Institutes, Shanghai Jiao Tong University



Objectives: Acupuncture, with its advantages of simplicity, convenience, incorruptibility, inspection and safety, has been practiced for over 4,000 years. Although studies have demonstrated the effectiveness of acupuncture for at least two dozen clinical conditions, little is understood about the biological basis, both at acupoints and meridians. **Methods:** Assuming that full activation of an acupoint can lead to transmission of a signal along its meridian, then, we should be able to detect similar biological changes in this stimulated acupoint, as well as other acupoints that did not receive direct stimulations in the same meridian. Based on this hypothesis, in this study we continuously stimulated acupoint GB39 of SD rats with catgut embedding into acupoint (CEP), once a week, for 8 weeks. **Outcome Measure:** At 72 hours after the last CEP, skin samples from GB39, and other two unstimulated acupoints GB34, and GB31, all of them are located in the gallbladder meridian of foot-shaoyang (GB) were collected. Expression changes of proteins were detected by iTRAQ, western blot, and immunohistochemical staining. The effects of bilateral CEP stimulations of SJ5 and GB34 at mice ear skin pigmentation and melanin value were also investigated. **Results:** We found that KNG (kininogen)-NO (nitric oxide)-MLC (myosin light chain) signaling pathway is activated not only at the stimulated-, but also at neighboring points in the same meridian, by 8-week stimulation. Furthermore, either of KNG or NO donor injection at bilateral SJ5 and PG34 mimicked the effect of CEP treatment on pigmentation and increase of melanin value in mice ear skin, and pre-injection of NOS inhibitor abolished these effects. **Conclusions:** Taken together, these findings demonstrate that the activation of KNG-NO-MLC signaling pathway plays an important role in biological process of sensitization of acupoints, and possibly in signal transductions among meridians.

Breech Presentation to Vertex by Acupuncture Treatment

Poster Board #: 101

Chandrashekhar Pardeshi, Dr Pardeshi Acupuncture

Conversion of breech presentation in to vertex by acupuncture treatment Dr Chandrashekhar Pardeshi. MD, DGO. Pune University Dr Pardeshi Acupuncture, Nashik 1. Problem: Report of breech presentation in Ultra-sonography at third trimester of pregnancy is matter of great fear in minds of patients and concern in minds of obstetricians. Unfortunately there are no safe method concert breech into vertex. In multi-gravida complications in vaginal delivery are increased and therefore they face more chances of elective caesarean section. Primi patients are routinely taken for elective caesarean section around maturity. 2. Purpose of study is to explore possibility of conversion of breech into vertex by Chinese Acupuncture treatment. Keeping safety of patient in mind and having extensive experience in obstetrics and also acupuncture treatment, 15 patients were subjected to acupuncture treatment with their consent after full explanation. 3. Results were surprising. After breech presentation was confirmed by ultrasonography, acupuncture treatment for 45 minutes was given for three days on OPD basis. Ultrasonography was repeated on 5th day. One patient was lost from study and did not report back after treatment. 11 of 14 patients had converted their babies to vertex presentation. 4. Author saw major paradigm shift about use of acupuncture in obstetrics and gynaecology. Author being senior obstetrician and gynaecologist of 40 years experience and also renowned acupuncturist (www.acupainthrapy.com) has used acupuncture treatment in many other conditions (<https://www.omicsonline.org/proceedings/acupuncture-in-obstetrics-and-gynecology-a-paradigm-shift-70468.html>) of subject. Routine use acupuncture treatment by all obstetricians worldwide will save patients from immeasurable sufferings and millions of dollars. Important part of therapy is it is already established by numbers of studies.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Can research show that low frequency electrical stimulation activates cannabinoids, modulating memory in chronic pain conditions?

Poster Board #: 76

Sharon Hennessey, *ACTCM@CIIS*; Jon Wheeler, *ACTCM@CIIS*

By examining recent research about the effect of learning in chronic pain patients, this poster will suggest the beneficial influence of endocannabinoids instigated by low frequency electrical stimulation with acupuncture, indicating another pathway of pain modulation. Recently, two scientists Apkarian and Biliki, et al. demonstrated hippocampus involvement, by showing Pavlovian acquisition and extinction of neuropathic pain in rodents. Their work indicates that with chronic pain hippocampal changes may appear. Rather than attributing the changes to anxiety, they suggest these changes are activated instead by stimulation from both peripheral and spinal input. This ongoing stimulation leads to the remodeling mesolimbic circuits, which typically direct learning in the cortex. This circuitry includes the nucleus accumbens, the amygdala, the hippocampus, and additional involvement of the prefrontal cortex. They posit that brain changes in this area may lead to permanent distortion of input, suggesting that chronic pain conditions then behave much like a conditioned response. This circuit, is also linked with models of addiction, leading Apkarian and Biliki to suggest that there are parallels between chronic pain and addiction. Exogenous cannabinoids impair all stages of memory; including encoding, storage, and retrieval. The amnesia like effects of cannabinoids are achieved by inhibiting several neurotransmitters associated with learning. The basal ganglia, substantia nigra, and hippocampus have the highest density of these receptors. Studies working with rodents have demonstrated that electrical acupuncture stimulation of CB1 receptor signaling, impairs the response to classical conditioning. While chronic pain may be encoded in memory, low frequency acupuncture stimulation which activates endocannabinoids, may help to reshape the response to chronic pain.

Case Report of Parkinson's Disease using Qihuang(QH)Needle Therapy

Poster Board #: 8

Zhenhu Chen, *Qihuang Healthcare, Guangzhou University of TCM*; Jun He, *Qihuang Healthcare, Guangzhou University of TCM*; Juan Yang, *Qihuang Healthcare, Guangzhou University of TCM*; Kun Zhang, *Qihuang Healthcare, Guangzhou University of TCM*; Michael Berger, *Qihuang Healthcare, Guangzhou University of TCM*

Purpose: Long-term medication for Parkinson's patients ultimately fails to prevent progressive disability and the quality of life is reduced. Therefore, the search for an alternative treatment that can significantly improve patients' motor symptoms becomes the key to the treatment of PD. In our clinic, hundreds of PD patients who only received the treatment with Qihuang (QH) needle showed significant improvement in their physical activity. Our patient was a 51-year-old male, with a small degree of involuntary tremor in the right hand and severe discomfort and dysfunction in the right side limbs for a period exceeding 6 months. Our diagnosis was determined as PD. The first treatment used 2.0 cun (QH) needle at Jianqian, LI10, GB29, GB33 using guanci the patient's limb coordination improved significantly and activities were not limited. 2nd treatment: LI14, SJ14, LU5, UB58, ST31; 3rd- LI11, C4jiaji, LV10, LV8, UB24. After 3 treatments, the patient's limbs were flexible and the associated symptoms improved dramatically. The Qihuang (QH) needle is a specially patented needle modeled after the ancient nine needle, yuanli-zhen and it uses specific manipulations from the Ling Shu, namely transport needling (Shuci), tri-directional needling (Heguci), articular needling (Guanci) It is characterized by a round and sharp tip and a hollow tube body. It's safe and pain-free, therefore quickly accepted by patients. In most cases, patients only require 2-3 treatments. It has good clinical effect and the efficiency rate is high.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Causes and Management of Shoulder Pain in UAE ^[1]_[SEP] using Chinese Medicine

Poster Board #: 5

Nassima Bekkar, Lotus holistic center

1. The purpose of this study is to deduce whether acupuncture has a role as a complementary therapy in the treatment of shoulder pain. 2. A random sample of 500 patients were collected, a consent form was presented and signed. Then, a follow-up was given to the patients after an acupuncture shoulder pain treatment. 3. - In UAE (at least according to our sample) the number of affected people seems to represent around four times more cases than elsewhere. - Most patients seen, who complained of shoulder pain were either middle age or older individuals. - The first cause of pain noted, is that the people here like elsewhere, spend 90% of their time in indoors. - The second cause is due to emotional problems such as stress, anxiety and depression. - The overwhelming majority of patients showed positive and quick results in one to three sessions using Chinese medicine. - The most efficient method is combining acupuncture dry and wet cupping treatment with moxa therapy or TDP lump. 4. - Causes of shoulder pain evident, can stem from lack of outdoor activities and emotional stress. - Acupuncture had proven to lessen and improve symptoms of shoulder pain and had been most effective when combined with other methods of treatment such as moxa therapy or TDP lump.

Central and Peripheral Mechanism of Acupuncture Analgesia on Visceral Pain

Poster Board #: 93

In-Seon Lee, National Center for Complementary and Integrative Health, National Institutes of Health; Soyeon Cheon, Department of Public Health National Cheng Kung University; Ji-Yeun Park, College of Korean Medicine, Daejeon University

Background/Aims. Despite the wide use of acupuncture for the management of visceral pain and the growing interest in the pathophysiology of visceral pain, there is no conclusive elucidation of the mechanisms behind the effects of acupuncture on visceral pain. This systematic review aims to provide an integrative understanding of the treatment mechanism of acupuncture for visceral pain. Methods. Electronic and hand searches were conducted to identify studies that involved visceral pain and acupuncture. Results. We retrieved 192 articles, out of which 46 studies were included in our review. The results of our review demonstrated that visceral pain behaviors were significantly alleviated in response to acupuncture treatment in groups treated with this intervention compared to in sham acupuncture or no-treatment groups. Changes in the concentrations of β -endorphin, epinephrine, cortisol, and prostaglandin E₂ in plasma, the levels of c-Fos, substance P, corticotropin-releasing hormone, P2X₃, acetylcholinesterase (AChE), N-methyl-D-aspartate (NMDA) receptors, and serotonin in the gut/spinal cord, and the neuronal activity of the thalamus were associated with acupuncture treatment in visceral pain. Conclusions. Acupuncture reduced visceral pain behavior and induced significant changes in neuronal activity as well as in the levels of pain/inflammation-related cytokines and neurotransmitters in the brain-gut axis. Further researches on the thalamus and on a standard animal model are warranted to improve our knowledge on the mechanism of acupuncture that facilitates visceral pain modulation.

Characteristics of Patients Seeking Acupuncture at an Oncology Clinic in the Los Angeles Area

Poster Board #: 42

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

Sue Mir, Southern CA University of Health Sciences; Jennifer Noborikawa, Southern CA University of Health Sciences; S. Prasad Vinjamury, Southern CA University of Health Sciences



Background: The American Cancer Society annually estimates the incidence and mortality of cancer. In 2018, cancer was predicted to cause over 600,000 deaths and 1.7 million new cancer cases. Globally, cancer affects 1 in 3 men and 1 in 5 women, with the most common cancers being breast, cervical, and other neoplasms. Cancer is typically treated using resection, radiation, and chemotherapy. Chemotherapy is often used to treat cancer, but side effects affect patient quality of life and adherence to treatment. Some side effects include peripheral neuropathy, hair loss, nausea, vomiting, constipation, or diarrhea among other things. Acupuncture offers patients a way to manage these side effects. **Objective:** To describe the patient characteristics of patients presenting to an oncology clinic offering acupuncture as adjunctive treatment for side effects of chemotherapy. **Methods:** A retrospective data analysis of patient demographic data collected during 2017-2018 included the following characteristics: age, gender, chief complaint, location, previous diagnosis of cancer, and nature of referral to the clinic. **Results:** Sixty-seven patients regularly sought acupuncture treatment at this oncology clinic. The majority of patients were late-middle aged females with complaints of pain. Although there were previous diagnoses of breast and colon cancer, as well as Non-Hodgkin's Lymphoma, many patients did not have a previous cancer diagnosis. Patients commuted from throughout Los Angeles County as well as far as Riverside County, and all paid cash for acupuncture services. All these patients were referred by oncologists at that center. **Conclusions:** Acupuncture as an adjunct treatment in the management of symptoms due to chemotherapy is in demand and doctors are willing to make referrals. It is important to increase patient access to complementary and integrative therapies as well as further examine the abilities of acupuncture to lower costs and improve quality of life in cancer patients.

Characteristics of patients who integrate Whole Systems Traditional Chinese Medicine with In Vitro Fertilization

Poster Board #: 22

Lee Hullender Rubin, Osher Center for Integrative Medicine, University of California San Francisco; Scott Mist, Oregon Health & Science University

Objective: To describe characteristics of patients who integrated Whole Systems Traditional Chinese Medicine (WSTCM) with In Vitro Fertilization (IVF). **Design:** Descriptive analysis of retrospective patient cohort who completed an embryo transfer (ET) from 2005 to 2010. **Materials and Methods:** When women integrate acupuncture with their IVF cycles, they may receive WSTCM, a multi-modal intervention. WSTCM consists of individualized acupuncture combined with diet and lifestyle modifications, nutritional supplements, Chinese herbs if appropriate prior to and during the IVF cycle, and two sessions on the day of ET acupuncture. Patient charts were included of women who completed an IVF-ET and integrated WSTCM from 2005-2010 at a single IVF center and affiliated acupuncture clinic and numbered 157. Excluded were charts that did not have an embryo transfer (n=22) or did not integrate WSTCM (n=1,662). Utilization rates of single modalities were tabulated and frequency of use was calculated. **Results:** There were 119 fresh and 9 frozen non-donor cycles; and 21 fresh and 8 frozen donor egg cycles. In addition to two standardized acupuncture treatments on the day of embryo transfer, all patients attended a mean number of 11.4 ± 12.1 acupuncture sessions prior to embryo transfer with 59.9% attending no more than 10 sessions. Chinese herbal therapy was used by 53.5% of patients, and 46.5% used at least one supplement. **Conclusions:** In this retrospective study, women used a variety of interventions as part of their integrated IVF cycle with WSTCM, including acupuncture, Chinese herbs, and prenatal vitamins.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Chinese medicine acupuncture effects on immunization with divalent anti-tetanus vaccine (tetanus and diphtheria toxoids) in BALB/c mice

Poster Board #: 89

SRC Soares, Faculdade de Medicina FMUSP; Faculdade EBRAMEC; TF Carvalho, Faculdade de Medicina FMUSP; CA Leal, Faculdade de Medicina FMUSP; MP Galisteo, Faculdade de Medicina FMUSP; AJ Andrade Junior, Faculdade de Medicina FMUSP; Reginaldo Silva-Filho, Faculdade EBRAMEC

The Chinese Medicine acupuncture is milenar, increasingly accepted in the Western world. It is known for potent analgesic action, however recent studies have shown its efficacy in promoting a positive immune response in several pathological situations, but the mechanisms involved in this action are not well understood. Studies with experimental animals associated with Chinese Medicine acupuncture allow a more comprehensive evaluation of the phenomenon involved, mainly among the immuno-neuroendocrine systems. In this work we propose to evaluate the innate and humoral immune response modulating events after immunization with the conventional anti-tetanus vaccine (diphtheria/tetanus toxoids), associated with the application of acupuncture in the experimental model of BALB/c mice. We evaluated the quantitative production of antibodies, cytokines and chemokines in groups immunized and treated with acupuncture. Samples of peripheral blood were tested by ELISA (IgG detection) and Flow Cytometry (Cytokines) assay. The detection of anti-tetanus IgG antibodies showed that levels for the acupuncture group were significantly higher ($p < 0.05$) than the control group after 2 and 3 doses of the vaccine. The data presented here support the hypothesis that the use of acupuncture may potentiate the humoral immune response when associated with immunization processes. The use of acupuncture can act as an effective tool for conventional treatment for tetanus disease; reduce side effects, length of stay and mortality rate.

Chinese Medicine Health Behaviors in Asian American Populations

Poster Board #: 44

Jennifer Noborikawa, Southern CA University of Health Sciences; Sivarama Prasad Vinjamury, Southern CA University of Health Sciences; Lungsheng Hsiao, Southern CA University of Health Sciences; Jenny Yu, Southern CA University of Health Sciences

Background: Chinese medicine has been gaining momentum as a complementary integrative medicine practice. It includes not only acupuncture and herbal therapy, but cupping, moxibustion, exercise and lifestyle modifications as well. In classical literature, the lifestyle modifications are called yang shen practices and are essentially health behaviors. Many Asian cultures have a traditional medicine, the majority of which generally have similar historical roots and tenants. As these cultures developed, traditional medicine became a significant part of culture and lifestyle. In this way, Chinese medicine may have a regular presence in individual lives, affecting their health outcomes. Objective: The purpose of this study was to determine the familiarity of Chinese medicine health behaviors (CMHB) in Asian American populations as well as the frequency of use of these behaviors. Methods: Informal interviews with several Asian American family units were used to develop a 22-question cross-sectional survey regarding The survey was distributed using Google Forms and results were processed using SPSS. Results: A total of 155 responses were collected, with the majority of respondents being female and identifying as a first generation Asian American. The behaviors most respondents were very familiar with was eating porridge when you are sick and drinking room temperature water. Most respondents very frequently utilized porridge consumption when they were sick as well as keeping their stomach covered while sleeping. We found that respondents' familiarity with and utilization of Chinese medicine health behaviors was independent of generational identity.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

Conclusion: Asian Americans are familiar with and frequently use selected CMHB. More research is warranted to determine if there are effects on health outcomes, which would expand the role Chinese medicine could play in public health.



Clinical reasoning in Chinese medicine and acupuncture

Poster Board #: 65

Binbin Zhang, University of Technology Sydney; Christopher Zaslowski, University of Technology Sydney

Objective: This project endeavours to research and analyse the clinical reasoning process associated with Chinese medicine and acupuncture using both qualitative and quantitative research methods. The study aim is to identify the key features of clinical reasoning associated with two commonly seen illness or conditions, such as insomnia and headache. **Method:** The project is an explorative study using both quantitative and qualitative approaches known as a mixed methodology. The participants must have at least seven years of clinical practise involving Chinese medicine and acupuncture. Participants can be of any ethnic background and level of education. Chinese medicine or acupuncture students, researchers and non-practising Chinese medicine practitioner and/or acupuncturist are excluded from the study. Twenty experienced acupuncturists and Chinese medicine practitioners from both Australia and China will be invited to participate. Participants will be asked to recall their clinical reasoning and cognitive decisions whilst viewing the video playback of their previous diagnostic encounter with the five simulated cases studies. This type of research method is called “recall playback” (Arocha & Patel 2008) and aims to identify the decision trees and key information (diagnostic cues) that are used by the diagnosticians in obtaining a final diagnosis. **Results:** Results will be presented outlining the key features and cues used by both experienced and novice practitioners. Decision trees and weighting of questions will be analysed to determine the similar and unique reasoning process in the two cohorts of experienced and novice practitioners. **Discussion:** This study attempts to identify the different approaches used during the clinical reasoning of Chinese medicine and acupuncture as well as the role that experience may contribute to the clinical reasoning process.

Combining Master Tung Points with Classical Acupuncture in the Management of Pain – Will it meet the needs of the Opioid Crisis?

Poster Board #: 97

Henry Hwang, Southern CA University of Health Sciences; S. Prasad Vinjamury, Southern CA University of Health Science; Jennifer Noborikawa, Southern CA University of Health Sciences

Background: Within the practice of acupuncture and Chinese medicine, there are several different kinds of acupuncture practices, each with their own virtues. Tung acupuncture is a family acupuncture system that developed and survived independently of the Traditional Chinese Medicine movement in China. Combining these points along with traditional acupuncture points based on traditional Chinese medicine theory and philosophy is considered specifically more effective in acute and chronic pain conditions. **Objective:** The objective of this presentation is to provide a protocol utilizing a combination of classical acupuncture and Tung acupuncture for the treatment of pain. It will specifically describe indications, specific points, and duration of treatment used. It will also include some real clinical examples and their outcomes. **Combining Master Tung and Classical Acupuncture in practice:** Master Tung points were commonly included in the acupuncture prescription for several chronic pain patients at a university health center. Usually 4-6 points located distally were used to treat for 10-20 minutes. These treatments were either repeated once or twice a week for 4-10 weeks and were determined on an individual basis. For example, a 67 y/o female presented to the university health center with acute LBP due to an accident 47 years

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

ago, rated at 9/10 on a VRS. She was receiving cortisone injections every 3 months and Tramadol as needed with no relief. After 10 visits, the combination of Master Tung with Classical Acupuncture reduced the pain to 3/10. Similar outcomes were noted in many other patients. Conclusion: Both classical acupuncture and Tung acupuncture are effective in the management of pain, but there is a special potential in the combination of parallel practices. This is especially relevant within the scope of the opioid crisis in the United States.



Comparison of the Efficacy of Traditional Chinese Medicines from Internet Sources

Poster Board #: 69

Verricchia Eatmon, Northwestern Health Sciences University; Sheryl Cota, Northwestern Health Sciences University; Lisa Opegard, Northwestern Health Sciences University; Susan Lawrenz-Smith, Northwestern Health Sciences University

The ready access of Traditional Chinese Medicine on internet websites allows individuals to buy herbal compounds directly, instead of obtaining them from a trained and certified TCM practitioner. The reliability of these sources for compounds and their effectiveness needs to be addressed. We have previously examined compounds available in our dispensary to identify those compounds that have anti-microbial activity as demonstrated by disk diffusion assay. Positive compounds were further investigated to determine the Minimum Inhibitory Concentration (the minimum amount of the compound required to inhibit growth in an overnight culture) and then analyzed by Thin Layer Chromatography. These results were compared with results from the same herbal compound obtained from internet sources. Our results suggest differences in the efficacy of the compounds purchased from some of these alternative sources. Thus, when dealing with Traditional Chinese Medicine, it appears essential to not self-treat, especially when dealing with herbs, but rather consult a practitioner.

Comparison of the Potential of Yoga Poses versus Tai Chi/Qigong Exercises for Low Back Pain measured by Electromyography and Laser Doppler Flowmetry.

Poster Board #: 33

Shin Lin, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Monica Bayasgalan, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Tony Nguyen, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Mario Elabd, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Mina Elabd, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Michael Luu-Trong, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Helen Vuong, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Trinh Do, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Eric Nguyen, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

Irvine.; Dylan Ayala, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine



Global Burden of Disease 2010 Study listed low back pain as one of the top 10 disorders that cause high numbers of Disability-Adjusted Life Years. The National Center for Complementary and Integrative Health states that “a carefully adapted set of yoga poses may reduce such pain and improve function”. In this pilot study, we compared several yoga poses previously reported to be beneficial with Tai Chi and Qigong exercises that show potential for this purpose. Eight healthy males and females of college age performed each exercise several times and average values were obtained. Muscle activity was continuously measured as average peak size by electromyography (EMG; SKY Network Technology Company’s Model A4 Bioelectric Signals Processing System) and blood flow/perfusion was continuously measured as “average flux” with a Laser Doppler Flowmetry (LDF) instrument (Moor DRT4). A pair of EMG electrodes and an LDF probe were placed on the lower right latissimus dorsi muscle just above the hip bone. For yoga, “Triangle” pose produced an average increase of LDF-flux to 512+46% (Mean+Standard Error) of baseline and average EMG of 1.41 arbitrary units, “Downward Dog” to LDF-flux=263+34% and EMG=1.43, and “Cobra” to LDF-flux=254+31% and EMG=1.35; for Qigong, “Deer Sprinting” to LDF-flux=374+43% and EMG=1.36, “Deer Looking Back” to LDF-flux=282+51% and EMG=1.37, and “9 Ghosts Drawing Sabers” to LDF-flux=258+25% and EMG=1.38; for Tai Chi, “Through Back Dodge” to LDF-flux=477+49% and EMG=1.34, “Needle at Bottom of Sea” to LDF-flux=478+66% and EMG=1.38, and “Twisted Body Fist” to LDF-flux=400+41 and EMG=1.26. These results indicate that while some of the exercises chosen for this study were somewhat more effective than others in activating a large muscle of the lower back and improving blood flow in that area, all exercises showed a high potential for strengthening that muscle for prevention and management of pain and increasing mobility at that location.

Complexity in Licensed Acupuncturists’ Clinical Reasoning

Poster Board #: 13

Lisa Conboy, Beth Israel Deaconess Medical Center, Harvard Medical School The New England School of Acupuncture at MCPHS University; Lisa Taylor-Swanson, College of Nursing University of Utah; Tanuja Prasad

Introduction Traditional Chinese Medicine (TCM) uses diagnostic and treatment procedures that are complex and tailored to each patient. Although this individualized treatment ideal is often replaced in clinical research with standardized protocols for the purposes of reliability and simplicity, the complexity of the medicine is a core concept and strength of traditional acupuncture and can be maintained successfully in an RCT format and often with better results than standardized protocols. This project aims to describe clinicians’ reasoning during the provision of individualized treatment. Methods We used a qualitative technique, Diagnostic Interviewing, to identify and describe variations in diagnostic reasoning and heuristics as described in retrospective accounts given by acupuncturists in response to their review of clinical records of a small sample of patients they treated in a clinical trial of acupuncture. Purposive sampling was used to create a sample of practitioners from the parent study (n=4) with variation in training, offered diagnoses, and years of experience. Each clinician completed 2 interviews covering 2-3 patient cases. Results We double coded the Diagnostic Interviewing data for themes of complexity, considering the TCM diagnostic framework as a complex system. We found support for the TCM diagnostic system to act as a complex adaptive system. Found codes include aspects of complex systems including emergence, adaptation, self-organization, non-linearity, and a critical phase change in a clinician’s thinking. Conclusions We requested our practitioners to perform individualized diagnoses - a complex process requiring more than recitation of memorized “facts” – and we are as interested in capturing how practitioners thought as what they thought. Considering the diagnostic process as a complex system may offer insight into the operation of other complex systems of clinical reasoning, such as biomedicine, in addition to adding to the medical education literature.

Sorted by abstract title



Correlating low back pain, smoking and chronic disease in Traditional Chinese Medicine and conventional medicine

Poster Board #: 103

Stefan Costescu, Romanian Society of Traditional Chinese Medicine

Purpose: to evaluate the correlation between smoking, low back pain (LBP), TCM diagnoses and the presence of chronic diseases in a population of patients who presented with LBP to an acupuncture clinic. **Patients and methods:** 61 patients in three groups (smokers with LBP, without LBP, non-smokers with LBP); retrospective study; TCM and conventional medicine diagnosis; low back pain: current or past; smoking: present or past, ≥ 5 cigarettes/day; a p of 0,1 was chosen as reference due to the small size of the subgroups. **Primary outcome:** to evaluate the correlation between smoking and low back pain. **Secondary outcomes:** to find potential correlations that could contribute to explaining the presence of LBP in non-smokers and the absence of LBP in the respective subgroup of smokers. **Results:** There is a statistically significant association between smoking and low back pain ($p=0.003$). There is a predominance of females in the group of non-smokers having LBP – 80,95% (compared to 48,15% and 61,5%, respectively); there is a higher prevalence of chronic diseases in the group of smokers without LBP – 84,62% (compared to 33,3% and 57,14%, respectively). Weak associations were found between smoking and the two prevailing TCM diagnoses of yin deficit and liver qi and blood stagnation and between chronic diseases and the two TCM diagnoses. **Conclusions:** TCM theory sustains the causality between smoking and low-back pain. The higher prevalence of LBP in women is confirmed by many studies. The particularity of the group of smokers who did not report LBP but associated a higher prevalence of chronic diseases could be explained by many factors including different patterns of somatisation, potentially on different energetical levels.

Diagnostic Reliability in TCM; The Way Forward.

Poster Board #: 49

Michael Popplewell, University of Technology, Sydney; John Reizes, University of Technology, Sydney; Chris Zaslowski, University of Technology, Sydney

Purpose of the study Diagnostic reliability is a crucial, but under investigated aspect of any therapy, including Traditional Chinese Medicine (TCM). The very language used in TCM diagnosis makes acceptable levels agreement between practitioners very difficult. For instance, Liver Heat and Liver Qi Stagnation could be easily be ascribed to the same patient by two different practitioners. In the above example, using traditional techniques of agreement, there would be no agreement, however both practitioners' diagnoses have Liver in common, so there is at least partial agreement. This commonality needs to be explored. **Methods used and summary of the results** A novel diagnostic methodology has been proposed that allows capturing of partial agreement. Significant increases in diagnostic reliability were attained when this new methodology was trialled alongside the contemporary TCM diagnostic format. **Conclusions** The increase in diagnostic accord that is achieved with the new methodology is the result of focusing on the common factors of TCM diagnoses. This new approach also provides a complete representation of a patient's health. This should warrant the attention of the TCM research community. In this talk, new projects currently in early stages of planning that further investigate TCM diagnostic reliability, including a large multi-center study will be presented. Another project that tests the use of questionnaires to further increase diagnostic reliability will be also be discussed. Feedback from the audience on the way forward in this important topic will be sought.

Sorted by abstract title



Digital Gene Expression Profiling Analysis of A549 Cells Cultured with PM10 in Moxa Smoke

Poster Board #: 70

xin hui, *Beijing University of Chinese Medicine*; ping liu, *Healthcare Management Center, Beijing Electric Power Hospital*; hao wang, *Beijing University of Chinese Medicine*; baixiao zhao, *Beijing University of Chinese Medicine*

Digital gene expression profiling (DGE), a next-generation gene sequencing technology, was used to observe the effect of moxa smoke PM10 on the gene expression profile of human lung adenocarcinoma A549 cells. The differentially expressed genes (DEGs) identified after PM10 treatment were screened, and their expression patterns were analyzed by cluster analysis, Gene Ontology (GO) function significance enrichment analysis and pathway significance enrichment analysis. The differentially expressed genes during PM10 intervention in A549 cells and their biological processes and major signal transduction pathways were screened. The relationship between the differentially expressed genes and the A549 cell cycle and apoptosis was analyzed. The main results are as follows: 1. Compared with the control group, there were 1109 differentially expressed genes (602 upregulated and 507 downregulated) and 3565 differentially expressed genes (1394 upregulated and 2171 downregulated) after 4 h of intervention. Compared with 4 h of smoking intervention, there were 2149 differentially expressed genes (1010 upregulated and 1139 downregulated) after 20 h of intervention. 2. There were 316 differentially expressed genes identified over the course of the intervention (4 h, 20 h). These genes were mainly upregulated after 4 h of intervention and downregulated after 20 h of intervention. 3. The biological functions of the differentially expressed genes showed significant enrichment. 4. Some pathways showed significant enrichment. Our results demonstrate that moxa smoke PM10 has many types of biological activities and can lead to differentially expressed genes in A549 cells involved in various biological processes. Moxa smoke PM10 is both positive and harmful to the body, so it is necessary to carry out further research on moxa smoke.

Distant Surgery Scar Points and Fascial Adhesions Perpetuate Pectoralis Minor Trigger Points in Two Cases of Severe Chronic Palmar Pain

Poster Board #: 41

Rena Margulis, *Tandem Point Therapy*; Melissa Borrero, *AFC Urgent Care*

OBJECTIVES: Report cases of one man and one woman, aged 44 and 40 at treatment, who developed severe chronic palmar pain following pectoral muscle stress (pain 5/10 and 7/10, pain durations of 11 months and 4 years, much earlier inguinal hernia surgery and cesarean section, respectively). The male patient declined ulnar nerve transposition. The female patient had an unsuccessful carpal tunnel release. **METHODS:** In each case, an active pectoralis minor trigger point (TrP) was located, and a fascial pull was palpated that originated at a surgery scar point and extended to the TrP. Acupressure to (a) the scar point and (b) fascial adhesions in acupuncture channels facilitated complete TrP release when treatment of the TrP alone failed. Patients consumed a high-protein diet including fresh seafood prior to treatment and consumed water or water plus electrolytes during application of acupressure. **RESULTS:** In both cases, one treatment ended severe chronic pain. Patients remained pain-free (0/10) four years post-treatment. **CONCLUSIONS:** In these cases, the distant scar points and fascial adhesions on acupuncture channels acted as trigger point perpetuating factors: when these factors were successfully treated, the trigger points resolved and did not return. This is believed to be the first report of scar points and fascial adhesions as distant trigger point perpetuating factors.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Does electro-acupuncture and escitalopram oxalate have a different mechanism in antidepressant effect? A single-blinded, double-dummy, randomized controlled clinical trial

Poster Board #: 62

Xinjing Yang, School of Chinese Medicine, Li Ka Shing Faculty of Medicine, The University of Hong Kong; Bingcong Zhao, School of Acupuncture-Moxibustion and Tuina, Beijing University of Chinese Medicine; Xingzhou Gao, School of Acupuncture-Moxibustion and Tuina, Beijing University of Chinese Medicine; Jing Li, Institute of Psychology, Chinese Academy of Sciences; Qiuyun Yu, School of Chinese Medicine, Jinan University; Xingchen Liang, School of Acupuncture-Moxibustion and Tuina, Beijing University of Chinese Medicine; Shixing Feng, School of Acupuncture-Moxibustion and Tuina, Beijing University of Chinese Medicine; Ye Zhang, Dongfang Hospital, Beijing University of Chinese Medicine; Xiang Li, School of Acupuncture-Moxibustion and Tuina, Beijing University of Chinese Medicine; Zhangjin Zhang, School of Chinese Medicine, Li Ka Shing Faculty of Medicine, The University of Hong Kong; Ya Tu, School of Acupuncture-Moxibustion and Tuina, Beijing University of Chinese Medicine

Background and Purpose Depression is a disease with high heterogeneity in both etiology and clinical. The low response rate of depression to current first-line antidepressants calls for an exploration on new treatment. A large number of studies have shown electro-acupuncture (EA) treatment for depression is safe and effective. The purpose of this study is to observe clinical effect and mechanism of EA and antidepressant (AD) escitalopram oxalate on depression by clinical evaluation, HPA and inflammatory-immune related indicators measurement. **Methods** This study was designed as a single-blinded, double-dummy, randomized controlled clinical trial. 61 depression patients were randomly divided into EA+placebo-AD group (EA group, n=20), placebo-EA+AD group (AD group, n=20) and EA+AD group (n=21) for 6 weeks treatment. Participants in AD group took prescribed dose of escitalopram oxalate everyday by psychiatrists. EA treatment was performed 3 times per week, 30 minutes each session in EA group. The main acupoints were GV20, GV29, HT7, PC6, SP6, ST36 and LR3. The HAMD-24, QIDS-SR16, and SF-36 scales were used for clinical evaluation. Peripheral blood was collected before and after treatment for Elisa and qRT-PCR to detect the expression levels of related indicators. **Results** After treatment, the response rates of HAMD-24 and QIDS-SR16 were the highest in the EA+AD group compared with single EA/AD group; there was no significant difference in the three groups ($p>0.05$). The QOL of the three groups was significantly improved after treatment ($p<0.01$); there was no significant difference among the three groups ($p>0.05$). Compared with EA group and AD group, the expression level of IL-6 was significantly decreased and the expression level of GILZ mRNA was significantly increased in the EA+AD group ($p<0.05$). **Conclusion** The combination of EA with AD may achieve antidepressant effect by modulating more extensive mechanisms. The specific effects of EA on depression need further research.

Does the Chinese medicine health consultation alone have therapeutic benefits?

Poster Board #: 12

Ooi Thye Chong, University of Edinburgh; Hilary OD Critchley, University of Edinburgh; Andrew Horne, University of Edinburgh; Marie Fallon, University of Edinburgh; Erna Haradottir, Queen Mary University, Edinburgh

Purpose: Past acupuncture studies tended to focus only on the needling component of an intervention and ignore the Chinese medicine health consultation (CMHC) component. However, an acupuncture treatment involves more than the insertion of needles into the body and CMHC is an integral part of an acupuncture encounter. CMHC is a structured and person-centred approach that is based on the established clinical practice of Chinese medicine. In our

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



mixed methods feasibility randomized controlled trial (RCT) of electro-acupuncture (EA) for chronic pelvic pain (CPP) in women, we hypothesized that CMHC intervention alone has therapeutic benefits. Methods: Women with CPP were randomized into one of the three groups: the EA treatment (EA + CMHC), CMHC alone or standard care (SC). Three focus group discussions were embedded in our trial to gain in-depth description of the perceived benefits of the participants' respective interventions. Focus group discussions were recorded, transcribed and analysed thematically. Findings: Thirty (30) women (10 in each group) were randomized into EA treatment, CMHC or SC. A total of 11 participants attended the three focus group discussions. Analysis of focus group discussions showed that the EA treatment group reported consistently stronger therapeutic benefits than those of the CMHC group, although they shared the following themes: a perceived pain reduction, enhanced sleep, energy level and sense of wellbeing. The SC group reported minimal to no benefits from their intervention: a dislike for the adverse effects of medications, frustration at the lack of effective treatment, heavy reliance on medications. They reported the provision of some community services as helpful. Conclusion: The CMHC group experienced lower therapeutic benefits than those in the EA group, but higher than those in the SC group, suggesting that CMHC intervention alone may have therapeutic benefits.

EDUCATIONAL TECHNOLOGY IN COMIC BOOKS ABOUT ACUPUNCTURE AND BREAST CANCER FOR USERS OF PUBLIC HEALTH SERVICES

Poster Board #: 47

ANA NOVAES, UFES; ELIANA ZANDONADE, UFES; MARIA HELENA AMORIM, UFES

OBJECTIVE: To publish an educational technology in comic book in order to promote access of acupuncture and cancer information to public health users. METHOD: The book "Talking about Acupuncture - The Life of Mary: A Feminine Look at Breast Cancer and Integral Treatments" was structured on the basis of topics covered during oncological and acupuncture care, such as daily difficulties, family relationships, life habits, social support and treatment. For this, the characters were created that could give life to this narrative. We sought to adopt simple and direct language to facilitate broad access to knowledge. Subsequently, we searched for images that could represent them, exemplifying the meaning of the text. Then all content was presented and discussed with an illustrator, a children's book writer and a screenwriter, undergoing adjustments. A draft was printed for evaluation by a group of mastectomized women, who approved the content in its entirety. Subsequently, several meetings were held to guide the illustrations and adjust the final text. RESULTS: This book has a Portuguese version and one in English and is registered in the ISBN under the number 978-85-8173-136-0. Copies were presented and distributed in the public health oncology hospitals in Brazil. CONCLUSIONS: This material allows a greater number of women with breast cancer to seek unconventional treatment, helping them cope with and overcoming the suffering often related to disinformation in the face of a disease that is still so feared and threatening. RECOMMENDATION: To increase publications related to acupuncture and other integrative practices as a way of empowering users about these therapeutic possibilities.

Effect of moxibustion on hyperhomocysteinemia and oxidative stress induced by high methionine diet

Poster Board #: 92

Hao Wang, Beijing University of Chinese Medicine; Xin Hui, Beijing University of Chinese Medicine; Lue Ha, Beijing University of Chinese Medicine; Yu An, Beijing University of Chinese Medicine; Baixiao Zhao, Beijing University of Chinese Medicine

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



OBJECTIVE To observe the effect of moxibustion on hyperhomocysteinemia, and from the perspective of enhancing antioxidant capacity and protecting vascular endothelium, to explore the therapeutic effects of moxibustion and to prevent atherosclerosis through early intervention. **METHODS** A total of 38 8-week-old SPF healthy female C57BL/6J mice were divided into three groups: control group, model group, and moxibustion group; 8 control groups, normal diet, and the rest of each group 15 only, feed with high methionine feed. Control group and model group: The mice were grasped and placed into a fixture, and the head, tail, and limbs of the mice were fixed (1 time/day, 6 times/week); moxibustion group: the mice were grasped and put into the fixator and moxibustion on RN17 Point 20min/time (1 time/day, 6 times/week). The mice were sacrificed after 12 weeks of intervention. The serum levels of Hcy, SAH, aortic homogenate SOD, eNOS, ox-LDL and HO-1 were measured by Elisa method. **RESULT** 1. Serum levels of Hcy and SAH: Model group, moxibustion group were all significantly higher than the control group; compared with the model group, the levels of Hcy and SAH in the moxibustion group were significantly reduced. 2. Aorta SOD, eNOS, ox-LDL and HO-1: Compared with the model group, SOD and HO-1 in the aorta of the moxibustion group were significantly increased, ox-LDL was significantly decreased, and eNOS had no significant difference; **CONCLUSION** High methionine diet can cause hyperhomocysteinemia. After a period of intervention, it can cause oxidative stress and injury of arterial endothelium. Through moxibustion intervention, serum Hcy and intermediate metabolites SAH content can be reduced, SOD and HO-1 can be increased, ox-LDL content can be reduced, and it can enhance the ability of the body to resist oxidation and protect endothelial function.

Effects of preventive moxibustion at Mingmen (DU-4) on glycogen and ghrelin of exhaustive swimming rats

Poster Board #: 90

Zhi-fang SUN, *Medicine School of Hangzhou Normal University*; Xiao-hong LI, *Beijing University of Chinese Medicine, Beijing 100029*

Objective: To observe the effects of preventive moxibustion at Mingmen (DU-4) on liver glycogen, muscle glycogen and serum ghrelin of exhaustive swimming rats. **Methods:** Randomly divided rats into normal control group, Mingmen moxibustion group, exhaustion control group, Mingmen moxibustion+exhaustion group according to their swimming exhausted time. Rats received an exhaustive swimming after 20 days of intervention. The serum ghrelin were detected by ELISA method. The liver glycogen and muscle glycogen of rats were detected by biochemical method and compared. **Results:** Compared with normal control group, the liver glycogen, muscle glycogen and serum ghrelin of Mingmen moxibustion group had no significant changes. The liver glycogen and muscle glycogen of the exhaustion control group were significantly decreased ($P < 0.05$, $P < 0.01$), and the serum ghrelin of the exhaustion control group was significantly increased ($P < 0.01$). Compared to the exhaustion control group, the liver glycogen and muscle glycogen of Mingmen moxibustion+exhaustion group were significantly increased ($P < 0.05$), and the serum ghrelin of Mingmen moxibustion+exhaustion group was significantly decreased ($P < 0.01$). **Conclusion:** The mechanism of moxibustion on Mingmen (DU-4) could improve the exercise tolerance may be associated with the glycogen on different parts of the body. As a brain gut peptide, ghrelin is involved in the metabolism of glycogen. Ghrelin may be the key factor of energy regulation on exhausted state.

Effects of Tai Chi Bang Exercise on Muscle Contractility and Blood Perfusion Measured by Electromyography and Laser Doppler Flowmetry.

Poster Board #: 34

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Shin Lin, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Tony Nguyen, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Mina Elabd, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Mario Elabd, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Michael Luu-Trong, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Monica Bayasgalan, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Helen Vuong, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Eric Nguyen, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Trinh Do, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine

Tai Chi Bang is a mind/body exercise in which some of the more commonly practiced Tai Chi movements are performed with the addition of a short wooden rod (“bang” in Chinese). The added benefits of using the bang include pressure stimulation of PC8 (Lao Gong/Worker’s Palace) acupoint at the center of each palm by the ends of the bang and increasing the intensity of the weight-bearing aspect of the exercise for the muscles. In this pilot study, we compared the 2-handed Chen Style Silk Reeling exercise with and without a Tai Chi bang (1.5 lbs., 4.5 cm x 40 cm), or a dumbbell (10 lbs., for comparison with extra weight). Six healthy males and females of college age were the subjects, who performed each type of exercise 3 times. Muscle activity was qualitatively graded as levels 1 to 3 according to the intensity of the electromyography (EMG) pattern (recorded with SKY Network Technology Company’s Model A4 Bioelectric Signals Processing System). Blood flow/perfusion was measured continuously as “flux” with a Laser Doppler Flowmetry (LDF) instrument (Moor DRT4). A pair of EMG electrodes and an LDF probe were placed on the middle of the right deltoid. Our results showed that during the up-down cycle (~6 cycles/minute) of the hands and arms in the silk reeling exercise, the additional weight of the bang or the dumbbell had increasing effect on the intensity of the EMG pattern compared with that of the empty-handed exercise (mean of 1.7, 2.4, versus 1.6, respectively). Similar results were obtained with LDF: 249+24% (Mean+SE% of baseline) and 261+33% versus 162+19%, respectively ($p < 0.05$). This study demonstrated that the use of the bang significantly increases muscle activity and the level of blood flow/perfusion during the Tai Chi exercise thus producing more benefits to the “body” aspect of the mind/body practice.

Effect of the NADA Protocol (Ear Acupuncture) in Reducing Symptoms of Acute Substance Use Withdrawal

Poster Board #: 100

Mary Beth Hassett, L.Ac., Dipl.O.M., Freeport Acupuncture; Kenneth L. Cavanaugh, PhD, Consulting statistician; Richard Hobbs, MD, FAAFP, FAAMA, Department of Community and Family Medicine, Geisel School of Medicine, Dartmouth College, and Plum Blossom Acupuncture and Integrative Medicine

1. Purpose: This pilot study examined the effectiveness of the National Acupuncture Detoxification Association (NADA) ear acupuncture protocol as an adjunct to conventional treatment for reducing self-reported adverse side effects associated with the withdrawal of opioids, alcohol, cocaine, and other substances in individuals in acute

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



detoxification. Only results immediately following treatment were assessed, not long-term effects. 2. Design: Non-randomized, single group pretest-posttest design, with self-selected volunteer participants serving as his or her own control. Settings/Location: An acute detoxification facility, Milestone Recovery in Portland, Maine. Subjects: 337 treatments were administered to participants (80% men and 20% women, ages 18-85) undergoing resident detoxification treatment. t. Intervention: The standardized NADA ear acupuncture protocol treatment (five needles inserted in each ear) was administered to each participant in small-group sessions. Over the eight months of the study, each participant received one to seven treatments. Outcome Measures: Prior to and immediately following treatment, participants were asked to rate eight symptoms on a numeric scale of 1 to 5, with 1 being the least severe and 5 most severe. The questionnaire assessed the level of pain, anxiety, depression, nausea, cravings, headache, sweating, and irritability. 3. Results: Responses with complete data on all outcomes (N = 337) reported reductions of 37.7% to 15.8% in mean severity of the eight symptoms. The reductions were both statistically significant (nominal $p < .0001$, using paired t tests) and clinically significant, as indicated by confidence intervals and large effect sizes for six of eight outcomes (Cohen's $d > .8$). Results remained highly significant after adjustment for repeated testing. 4. Conclusions: The results of this non-randomized study provides additional empirical support for the effectiveness of the NADA auricular acupuncture protocol as an adjunct to conventional treatment in reducing symptoms associated with acute withdrawal from substance use.

Electroacupuncture for under-managed Ankylosing Spondylitis pain: a single-arm pilot study

Poster Board #: 27

Wing Lok LAM, School of Chinese Medicine, The University of Hong Kong, Hong Kong, China; Wing Fai YEUNG, School of Nursing, The Hong Kong Polytechnic University, Hong Kong, China; Chak Sing LAU, Department of Medicine, The University of Hong Kong, Hong Kong, China; Haiyong CHEN, School of Chinese Medicine, The University of Hong Kong, Hong Kong, China; Fei JIANG, Department of Statistics and Actuarial Science, The University of Hong Kong, Hong Kong, China; Lixing LAO, School of Chinese Medicine, The University of Hong Kong, Hong Kong, China

Purpose To determine the efficacy of electroacupuncture in reducing under-controlled Ankylosing Spondylitis (AS) pain. **Methods** This single-armed pilot study recruited twenty subjects with under-managed AS pain in Hong Kong. Semi-standardized electroacupuncture was administered twice per week for 6-10 weeks. Outcomes including pain severity numerical rating scale (NRS), drug diary, Bath Ankylosing Spondylitis Functional Index (BASFI), Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Global Index (BASGI), Bath Ankylosing spondylitis Metrology Index (BASMI), SF-36, Chest expansion, Joints count, C-reactive protein (CRP), and Erythrocyte sedimentation rate (ESR) were measured at baseline, week 6, 10 and 18. **Results** Recruitment was conducted from March 2016 to August 2017. Fifteen out of twenty subjects completed all assessments from baseline to week 10. About 11% of data were missing and treated by last observation carried forward (LOCF). One-sided exact binomial test illustrated no less than 10% of the subjects reached 30% pain NRS reduction at week 6 (p -value = 0.002). **Conclusion** Six weeks electroacupuncture may be useful in reducing pain in patients with Ankylosing Spondylitis.

Electroacupuncture on Post-Stroke Overactive Bladder: A Multi-site Randomized Controlled Trial

Poster Board #: 9

Haiyong Chen, School of Chinese Medicine, The University of Hong Kong; Changde Wang, ; Minjie Zhou, ; Pui Yan Chan, School of Chinese Medicine, The University of Hong Kong; Lo Lo Yam, School of Chinese Medicine, The University of Hong Kong; Wing Lok Lam, School of Chinese Medicine, The University of Hong Kong; Kwok-Pui Leung, ; Sheung-Wai Li, ; Wai-

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

Yin Tsang, ; Bacon Fung-Leung Ng, ; Eric Tat-Chi Ziea, ; Wing-Fai Yeung, ; Lixing Lao, School of Chinese Medicine, The University of Hong Kong



Objective To explore the effects of electroacupuncture in the treatment of post-stroke overactive bladder (OAB). **Methods** This study was a multi-site randomized, assessor-blind, controlled trial of patients with post-stroke OAB. Thirty-four post-stroke subjects (mean age 71.0 years; 32.4% female) with OAB symptoms were randomly assigned to the electroacupuncture treatment group or the control group at a 1:1 ratio. The subjects in the treatment group were treated with 6 sessions of acupuncture for 4 weeks, while the subjects in the control group receive the usual care. The primary outcome measure was the Overactive Bladder Symptom Scale. Secondary outcome measures included a 3-day bladder diary and the Stroke Specific Quality of Life Scale (SSQoL). **Results** The electroacupuncture treatment group showed a moderate effect size on improving the perceived severity OAB symptoms as measured by the OABSS at week 5 (1 week posttreatment, effect size = 0.57, $P = 0.034$) and week 8 (4 weeks posttreatment, effect size = 0.60, $P = 0.021$), although the result became insignificant after Bonferroni correction. No significant differences in the bladder diary or SSQoL score were found. The electroacupuncture treatment was well tolerated by the post-stroke subjects. **Conclusion** The 6-session electroacupuncture treatment may reduce OAB symptoms in post-stroke patients. Further fully powered trials are warranted to confirm the efficacy of electroacupuncture for those with post-stroke OAB.

Evaluation of Chinese Herbal Medicines: From Western Science Episteme

Poster Board #: 96

Samuel Meyer, Northwestern Health Sciences University; James Seale, Northwestern Health Sciences University; Tevin Douglas, Northwestern Health Sciences University; Alexander Thao, Northwestern Health Sciences University; Kristin Blake, Northwestern Health Sciences University; Sheryl Cota, Edith Davis Herbal Dispensary; Susan Lawrenz-Smith, Northwestern Health Sciences University; Lisa Oppegard, Northwestern Health Sciences University

For centuries the divide between traditional Chinese medicine (TCM) and Western medicine has kept valuable knowledge from being shared freely between practices. With the increase in antibiotic resistant bacterial strains, both practices stand to benefit from cross-analysis of treatments. Our scientific study has evaluated a large library of TCM herbs, from the perspective and methods of established laboratory protocols. The aim of this study is to assess the antimicrobial properties present in individual herbs, and determine the inhibitory concentration of the herbs. Testing for antimicrobial activity was done via disk diffusion assay, and the zone of inhibition of growth compared to a known antibiotic. Compounds found active against a microbe were tested to determine the minimum inhibitory concentration (MIC). To date we have identified more than 30 TCM that show antimicrobial activity. The positive compounds were assessed for possible toxic effects by assaying lysis of human and sheep red blood cells. We are in the process of isolating the active antimicrobial compounds from the TCM via thin layer chromatography (TLC) and column chromatography. TLC will be performed on active column chromatography fractions to attain the purest compound for structural analysis to identify novel antimicrobials. We intend to use these methods to analyze all TCM in our dispensary.

Evaluation of the Benefit Provided by the Addition of Acupunctural Analgesia With Electrostimulation to Conventional Local Anesthesia Compared to Conventional Local Anesthesia Alone in Surgery of Deep Brain Stimulation for Movement Disorders

Poster Board #: 50

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

Sylvie Raoul, Nantes University Hospital; Regine Brissot, Nantes University Hospital; Alain Huchet, French College of Acupuncture



The effectiveness of Deep Brain Stimulation (DBS) in certain movement disorders is widely demonstrated. The success of this procedure requires that the patient is awake and cooperative. The conditions of this intervention can be difficult to tolerate by the patient for several reasons: long procedure (from 3 to 8 hours), body immobilisation (particularly the head in the stereotactic frame), stress related to the localization of the DBS. It is therefore important to improve the comfort as well as the cooperation of the patient, during implantation of the DBS electrodes, in order to optimize the conditions of the intervention. In addition to analgesia, acupuncture should allow sedation without affecting alertness and should contribute to the regulation of any vegetative reactions during the procedure. Therefore, we hypothesize that acupuncture could improve the quality of care of the patient during a DBS procedure. In practice, this is electroacupuncture that will be used in this research to maintain the stimulation of acupuncture points to an optimal level during the time of the intervention. The trial is now completed. The statistics are in progress and will be completed by December 2018. Nevertheless, we can say that unfortunately, the outcomes are not positive for acupuncture, because of the low number of patients. But, two patients could not undergo DBS without the use of acupuncture. Alain Huchet MD Nantes University Hospital, France

Exploring the Potential Benefits of the Use of Acupuncture to Reduce Agitation, Irritability and Anxiety in Alzheimer's Disease and Alzheimer's Disease Related Dementias Utilizing Non-Invasive Measures of Autonomic Nervous System Physiology

Poster Board #: 43

Kathleen Monahan, Massachusetts General Hospital; Jessica Gerber, Massachusetts General Hospital; Victoria Williams, Massachusetts General Hospital; Jennifer Gatchel, Massachusetts General Hospital; Steven Arnold, Massachusetts General Hospital; Alison McManus, Massachusetts General Hospital

Previous research supports the use of acupuncture as a possible treatment for anxiety and related disorders, yet little research has focused on anxiety, irritability, and agitation (AIA) symptoms in patients with Alzheimer's Disease and Alzheimer's Disease Related Dementias (AD/ADRD). AIA symptoms are very common in AD, affecting nearly every patient at some point in their disease progression. Pharmacological solutions are sparse and with significant side effect burden, prompting researchers to consider alternative, more holistic options. The current pilot study explores acupuncture as a potential treatment for anxiety, irritability, and agitation symptoms in AD/ADRD. We hypothesize that acupuncture will offer an acute benefit to AD/ADRD participants by relieving AIA symptoms and reducing autonomic dysfunction. We aim to recruit individuals aged 55-95 with AD/ADRD to participate in a study evaluating physiological and mood correlates of AIA symptoms, with half being offered a 20-minute acupuncture session. Primary outcome variables include continuous physiological monitoring of skin conductance (SC) during the treatment and heart rate variability (HRV) and motor restlessness (i.e. actigraphy) using the BioStamp nPoint patch before, during, and for 24 hours following acupuncture treatment. Additionally, subjective mood ratings (Profile of Mood States- POMS), and a general activities and AIA symptoms log will be collected pre and post treatment. Analysis of these measurements will help us determine if acupuncture positively affects AIA symptoms and autonomic dysfunction in AD/ADRD. Findings may thus provide evidence for acupuncture as a novel, nonpharmacological approach for treating anxiety, irritability, and agitation symptoms in this patient population.

Feasibility and acceptability of a brief acupuncture intervention for service members with perceived stress

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Poster Board #: 1

Jane Abanes, U.S. Naval Hospital Okinawa, Japan; Cynthia Hiers, Veterans's Affairs; Bethany Rhoten, Vanderbilt University; Mary Dietrich, Vanderbilt University; Sheila Ridner, Vanderbilt University

Introduction: Given the role of perceived stress in disability and suicidality in the military, intervening early before service members become at risk for severe injuries, hospitalizations, and chronic disability could improve health outcomes. The purpose of this study was to explore the feasibility and acceptability of a standardized stress acupuncture (SSA) approach on perceived stress in U.S. military personnel. This study had the following aims: examine feasibility of recruitment for SSA and implementation of study procedures in preparation for a methodologically rigorous study; examine acceptability of SSA treatment in a sample of military personnel with perceived stress, and examine change in perceived stress and general health before and after SSA. **Materials and Methods:** This was a single-arm, single-site study protocol which assessed the feasibility of SSA in 16 patients with perceived stress. Upon IRB approval and written informed consent, the participants received 4 weekly sessions of SSA which consisted of 6 acupuncture points. **Results and Conclusion:** This study showed that recruitment and implementation of SSA is feasible in service members. Service members found ASA to be acceptable. Statistically significant increases were found on the energy/fatigue, well-being, and social functioning components of the Short Form Health Survey (SF 36) (reliable change: 50%, 56%, and 25% respectively, Cohen's $d = 0.72-0.78$, all $p < .05$). A statistically significant decrease in perceived stress based was found on the Perceived Stress Scale (PSS) (reliable change 63%, Cohen's $d = 1.03$, $p = 0.001$). These results suggest that SSA is a feasible and acceptable treatment for perceived stress in military personnel. Preliminary findings suggest that SSA may be useful in improving energy/fatigue, social functioning, and perceived stress of service members.

Geographical origin discrimination of commercial moxa floss using E-nose coupled with pattern recognition algorithms

Poster Board #: 79

Min Yee Lim, Beijing University of Chinese Medicine; Jian Huang, Dongfang Hospital, Beijing University of Chinese Medicine; Baixiao Zhao, Beijing University of Chinese Medicine

Purpose of the study: The main combustion material used in moxibustion is moxa floss, which has a characteristic odor that is highly dependent on the geographical origin and processing method of its starting material mugwort leaves. The electronic nose (e-nose) is a technology that has been developed to mimic the human olfactory perception to perform odour evaluation on a continuous basis. The cross-reactive sensor array in the e-nose interacts with the volatile compounds of the sample and generates multivariate responses that can be used as an "electronic fingerprint" to discriminate the odors. The main aim of this study was to analyze the potential of using the e-nose to discriminate the volatile constituents of the moxa floss samples and distinguish the samples using pattern recognition algorithms. **Methods used:** Commercial moxa floss samples of different quality grades produced by different manufacturers in China were randomly selected in this study. All samples were analyzed on an e-nose combined with a headspace auto-sampler. The sensor array is composed of 12 metal oxide semiconductor type chemical sensors. Pattern recognition algorithms were employed to classify the samples and the best parameters for classification modeling were explored. **Results:** The overall e-nose response patterns of the samples were similar, but with varying intensities. This demonstrates similar odour profiles but different concentrations of volatile compounds in different moxa floss samples. The Best-First CfsSubsetEval (BC) feature selection method identified three MOS sensors (S2, S6, and S11) contributing the most valuable information for the moxa floss samples, which achieved cost-effectiveness and operational simplicity, while retaining prediction accuracy. **Conclusions:** The

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

combination of e-nose and pattern recognition algorithms could be an objective way for preliminary determining the origins and quality of moxa floss. Data from our study is important for future studies on work related to moxa floss safety and quality control.



Guidelines for Treating Problematic Screen Use

Poster Board #: 83

Diana Yang, Carla Wilson

Problematic screen use is a broad category including video games, pornography, social media, and general internet use. It has gained massive exposure in the last decade, with the last few years seeing massive media exposure. The amount of attention it is receiving is rivaled only by the extremity of the problem itself. It is estimated that the prevalence rate of internet addiction is up 38% of users, though this number varies greatly. The comorbidities involved are serious as well. In young males of teenage and 20's years, one study estimates a 40% prevalence rate of sexual dysfunction linked to pornography addiction. The Center of Humane Technology, formed by former employees from Silicon Valley, has reported purposeful design of internet applications to engage users repeatedly. The problem affects all age groups and all socioeconomic levels, with serious psychological, social, and neurological issues. This is a serious issue, with the youth of this nation suffering most severely. In this presentation we talk about the statistics of problematic internet use, pathology, and treatment.

Health risk assessment analysis of exposure to PM2.5 in moxibustion clinics

Poster Board #: 78

Jian Huang, Dongfang Hospital, Beijing University of Chinese Medicine; Min Yee Lim, Beijing University of Chinese Medicine; Baixiao Zhao, Beijing University of Chinese Medicine; Hui Hu, Dongfang Hospital, Beijing University of Chinese Medicine

Purpose: The aim of this study was to evaluate the safety of moxa smoke PM_{2.5} to assess the health risks associated with PM_{2.5} exposure in moxibustion clinics. **Methods:** This study investigated moxa smoke PM_{2.5} from the aspects of its chemical composition and health exposure risk assessment. PM_{2.5} was collected by burning moxa floss samples in moxibustion clinic and collected onto filters using a MiniVol sampler at a height of 1.5 m and constant flow rate of 5 L/min. Inductively Coupled Plasma-Mass Spectrometry was used to determine the trace elements in PM_{2.5} in moxibustion clinics. The health risk assessment of moxa smoke exposure was performed by using the inhalation risk assessment model for occupational exposure recommended by the US Environmental Protection Agency to estimate PM_{2.5} carcinogenic and non-carcinogenic health risks for acute and chronic exposure in moxibustion clinics. **Results:** The concentrations of heavy metal elements Pb, Cd, Hg and As in moxibustion clinics PM_{2.5} were lower than the national air quality standard concentration limits. The annual carcinogenic risk assessment for all carcinogenic metal elements was lower than the risk limit (1×10^{-6}), indicating that there was no significant carcinogenic risk for doctors and patients in moxibustion clinics due to exposure. **Conclusion:** The results from this study indicated that there is no obvious carcinogenic risk due to moxa smoke PM_{2.5} exposure. These results can help to provide reference for future studies in the establishment of a quality monitoring system in moxibustion environment for the evaluation of the safety of moxa smoke.

Immediate Effect and Adverse Events of Battle Field Acupuncture (BFA) for Pain Reduction in Cancer Survivors

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Poster Board #: 66

Yi Lily Zhang, Memorial Sloan Kettering Cancer Center; Qing S. Li, Memorial Sloan Kettering Cancer Center; Jaime Green, Memorial Sloan Kettering Cancer Center; Mary Shea, Memorial Sloan Kettering Cancer Center; Jun J. Mao, Memorial Sloan Kettering Cancer Center

Background: Battle Field Acupuncture (BFA) is one form of auricular acupuncture system. It is widely used in the military for soldiers and veterans with acute and chronic pain. This technique gained popularity due to its empirical success; however, clinical safety and effects of BFA for cancer survivors are unknown. This study evaluated the immediate effect of BFA for pain reduction in cancer survivors and its associated adverse events.

Methods: We analyzed the clinical documentation of cancer patients with chronic musculoskeletal pain who received one treatment of the Battle Field Acupuncture. A 0-10 numerical rating scale was used to evaluate the pain pre- and post-treatment. Paired t-test was used to analyze the change in pain ratings before and after one BFA treatment.

Results: Among 119 patients who received one BFA treatment, mean (SD) age is 62.7 (SD 11.7) (range 25.9-87.1); 70.0% were female and 22.7% were non-white. Primary sites of chronic pain were lower back (28.6%), Knee (16.8%), and Shoulder (12.6%). The duration of pain prior to acupuncture treatment was 4.8 (SD 5.2) years. At the end of the first BFA treatment, pain was reduced from a rating of 4.6 (SD 1.9) to 1.8 (SD 2.0), $p < 0.001$; 88 (76.5%) patients had 30% or more reduction in their pain rating immediately after the treatment; 8 (6.7%) patients reported dizziness and 1 (0.8%) reported bothersome pain at needling site. An average of 6.6 (SD 2.9) studs were used in the BFA treatment.

Conclusions : Most cancer survivors with chronic pain tolerated BFA treatment and had significant immediate pain reduction with a single session of BFA treatment. While this knowledge can help inform the practice of BFA in an oncology setting, a carefully controlled and well-powered trial is needed to evaluate the long-term impact of BFA on outcomes in survivors with chronic pain.

Immediate Effect Evaluation of Acupuncture Treating Shoulder Bi Syndrome with A Single Acupoint

Poster Board #: 54

Reginaldo Silva-Filho, Faculdade EBRAMEC; ShuZhong Gao, Shandong University of Chinese Medicine

Introduction: Shoulder pain is common and associated with substantial morbidity. Acupuncture is an effective and proven treatment for pain and different methods have been applied for of shoulder pain. But very few studies have been conducted with a Brazilian population which might have specific characteristics. **Objective:** The aim of the present study is to evaluate the immediate effect of acupuncture on shoulder pain by the use of a single needle intervention. **Method:** 150 patients will be randomly divided into 5 groups (A肩髃穴, B条口穴, C肾关穴, D阳陵泉穴 and E液门穴), with 30 participants on each group for a single acupoint stimulation with needle manipulation for DeQi for 30 seconds and 5 minutes retention with active movement of the shoulder. The primary outcome measure was decreasing of pain through Numeric Rating Scale (NRS) and the secondary outcome was improvement of shoulder Range of Motion (ROM) by goniometry. **Results:** Treatment groups were similar at baseline, and all groups

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



demonstrated a significant decrease ($p < 0,0001$) in the NRS were found for all the groups and Group C presented the best improvement of 69,30%. There was significant improvement ($<0,0001$) on shoulder flexion and abduction ROM for all groups. Conclusion: It was concluded that a single intervention with a single needle can be effective for reducing the pain and improving the ROM on patients with shoulder pain. Larger studies such as randomized controlled trials with follow-ups are encouraged in order to better evaluate the clinical effects.

Improving the effectiveness of chemo-therapy with Tai Chi-a case report of a Cancer patient

Poster Board #: 61

Fuming Xue, The Institute of Tai Chi, Alpharetta, GA; Helen Huang, MCPHS university, Worcester MA; Lisa Conboy, MCPHS university, Worcester MA

This case study examines the feasibility of the application of Tai Chi practice, to a patient with end-stage metastatic pancreatic cancer, as a form of integrative care. Case Presentation. Traditional Tai Chi exercise has unique physiological characteristics and mechanisms suitable for patients with limited physical strength. This case documents improved effectiveness of chemotherapy, and pathological condition with Tai Chi practicing. As a result, the patient was able to reduce abdominal ascites; improve appetite; reduce ankle edema, and participate in some social events. Furthermore, her quality of life was much improved by a combination of Tai Chi and biomedical cancer treatments, suggesting that Tai Chi may be a feasible adjunct for cancer treatment. Conclusion: Tai Chi was well received by this patient with metastatic pancreatic cancer, the effectiveness of chemotherapy was improved for her, and treatment side effects were reduced, thereby allowing the patient to manage her cancer more effectively. Discussion: A possible mechanism for this case is that Tai Chi improves the blood circulation and oxygen supply and increases the oxygen density in the tumor cells. In this style of Tai Chi practiced by this patient, only the heart rate (HR) increased while the respiratory rate (Rf) stayed constant; the stroke volume (SV) was constant or even decreased. This might suggest that with Tai Chi practice, sympathetic excitability, kidney adrenaline and norepinephrine may not increase; visceral blood perfusion may be increased. Further study will be needed to see these measurable biometrics for patients who are willing to incorporate Tai Chi into their integrated cancer treatment. Keywords: Tai Chi, heart rate, respiratory rate, stroke volume, chemotherapy, effectiveness of chemotherapy

Integration of auriculotherapy into primary healthcare using a large-scale educational model: an observational study with 2982 professionals

Poster Board #: 109

Ari O. O. Moré, Federal University of Santa Catarina, Florianópolis - Brazil; Charles D. Tesser, Federal University of Santa Catarina, Florianópolis - Brazil; Melissa C. Santos, Federal University of Santa Catarina, Florianópolis - Brazil; Emiliana D. Silva, Federal University of Santa Catarina, Florianópolis - Brazil; Fátima F. Pelachini, Federal University of Santa Catarina, Florianópolis - Brazil; Lúcio J. Botelho, Federal University of Santa Catarina, Florianópolis - Brazil

Background: Auriculotherapy is a therapeutic method used in different public health systems. In this context, an auriculotherapy semi-on-site course was offered to Brazilian primary healthcare professionals between 2016 and 2017. The course was funded by the Brazilian Ministry of Health and developed by the Federal University of Santa Catarina. With 75 hours of distance learning and 5 hours of on-site practice in 27 cities of 22 Brazilian states, the course was completed by 4273 professionals from 1022 municipalities. Objective: To analyze the profile of the

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



participation of the professionals, the reasons of drop out and the integration of auriculotherapy practice in the healthcare services by the course students. Method: A questionnaire with 35 questions was sent by e-mail after the end of the course to the 5703 participants enrolled. Results: 2982 professionals answered the questionnaire (52% of the total), of which 86% were women and with a mean age of 36.8 years. The main reasons for the 5% of respondents who did not complete the distant learning stage were lack of time (47%) and personal reasons (26%). The most used didactic resources were video-lessons (91%), module's handouts (82%) and interactive virtual ear (76%). 79% of the students felt able to practice and 73% started using auriculotherapy after the course. Nurses (35%), Physical Therapists (14%), Psychologists (8%) and Medical Doctors (7%) were the most common professionals that enrolled the course and responded the survey; 93% of the participants answered that the practice was well accepted by the patients; 96% stated that in their observation effectiveness of auriculotherapy is optimal or moderate and 99% would recommend the course to a colleague. Conclusion: Most enrolled professionals successfully completed the course and started auriculotherapy practice. The semi-on-site course strategy seems to be a feasible educational model of inserting and disseminating auriculotherapy in primary healthcare.

Integration of Doctor of Acupuncture & Oriental Medicine (DAOM) Students in an Acute Pain Service

Poster Board #: 39

Kathleen Lumiere, Bastyr University; Ray Zhang, University of Washington; Ivan Lesnik, University of Washington; Sara Bayer, Bastyr University; Debra Gordon, University of Washington

Acute pain following trauma and surgery is best treated using a multimodal approach including use of nonpharmacological strategies. Evidence of effectiveness and demand for acupuncture to treat acute pain conditions is growing. This talk and/or poster describe collaboration between X University and the X's Integrated Pain Care Program to integrate acupuncture in an Acute Pain Service (APS). We report on our model of integration of Doctor of Acupuncture and Asian Medicine (DAOM) students within an interdisciplinary APS and the documented patient outcomes. Results to date indicate even one acupuncture treatment has reported benefits and no serious complications. Our sample comprises 323 consecutive patients with an acupuncture treatment documentation note recorded between July 24, 2017 and October 1, 2018. Of these, the average age was 43.6 (SD 15.2) and 61% were female. Patient-reported pain intensity ranged from 0-10 with an average pre-treatment intensity of 6.40 (SD 2.23) and post treatment 3.72 (SD 2.45). The average difference between pre and post pain intensity ratings was 2.68 (SD 2.25). Using a self-reported Pain Relief Scale patients were documented as having none(7.4%), slight (22.6%), moderate (29.4%), lots(14.9%), complete(6.5%) relief from pain as a result of the single acupuncture treatment(Figure 2). 19.2% of this self-reported PRS was missing. Treatments averaged 36 minutes (SD 17.99) and ranged from 20 to 215 minutes in length. One patient asked for the needles to be removed early as she reported having a panic attack. Several patients had the needles removed early for safety when they were unable to lie still for the duration of the treatment. This model of collaboration between academic and clinical programs may provide the structure to integrate acupuncture into other hospital in-patient settings.

Integrative Approach to Chronic Pain November 2018

Poster Board #: 23

Lamya Kamel, Pacific College of Oriental Medicine

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Chronic pain is a condition affecting 44.2% of the adult population in the US alone with economic implications for the individual and society as a whole. Many consumers turn to complimentary and alternative medicine. Despite increasing research there is still debate concerning the validity and place of complimentary and alternative medicine in the healthcare system. The purpose of this study is to compare the effectiveness and cost-effectiveness of an integrative approach to the treatment of chronic pain. Specifically, the integrative (multi-modal) approaches compared are whole systems traditional Chinese medicine (WS-TCM) and whole systems traditional Chinese medicine combined with whole systems chiropractic medicine (WS-CM). A retrospective chart review was performed documenting numerical pain scales and cost of total treatment for charts of patients who were treated for the chief complaint of chronic pain. Statistical analyses used to measure effect and cost were a 2x2 mixed ANOVA and a one-way ANOVA respectively. The conclusion is that treating chronic pain with WS-TCM alone and WS-TCM combined with WS-CM are both effective and cost-effect with the multimodal approach being more effective but less cost-effective than the single modal approach. The results of this pilot study are encouraging and merit a larger scale inquiry.

Interdisciplinary Relationship Models for Complementary and Integrative Health: Perspectives of Chinese Medicine Practitioners in the United States

Poster Board #: 2

Belinda Anderson, Monmouth University; Sai Jurawanichkul, Pacific College of Oriental Medicine; Ben Kligler, Albert Einstein College of Medicine; Paul Marantz, Albert Einstein College of Medicine; Roni Evans, University of Minnesota

Purpose: The combination of biomedicine and traditional and complementary medicine (T&CM) is often referred to as integrative medicine. However, epistemological and paradigmatic differences are barriers to integration. This study explores the perspectives of experienced Chinese medicine practitioners when asked about the most ethical model for the relationship between biomedicine and T&CM. **Methods:** Thirty-One Chinese medicine practitioners, undertaking a doctoral upgrade program, participated in this study. Participants were asked to read a publication discussing three models (opposition, integration and pluralism) for the relationship between biomedicine and T&CM and then discuss, via an online forum, the most ethical model. An inductive content analysis of the forum posts was undertaken to identify common themes, followed by member checking. **Results:** The data were found to contain six major and six minor themes. There was a clear preference for pluralism. The Chinese medicine practitioners expressed reservations about the integrative model, and above all cared about the quality of patient care. Much dialogue occurred around issues related to a power imbalance within healthcare, and possible cooptation issues. Paradigmatic differences and biomedical research methodology were seen as problematic to the validity of research findings. Interprofessional education was viewed as critical for the development of respect, shared patient care, and referrals between clinicians from different disciplines. **Conclusion:** This study provides insight into the issues associated with combining biomedicine and T&CM that are perceived by Chinese medicine practitioners. Such insights are important for the development and management of clinical settings that provide complementary and integrative healthcare.

International case registry study for Acupuncture-Moxibustion on Low back pain: design and development

Poster Board #: 36

Jia Liu, China Academy of Chinese Medical Sciences; Baoyan Liu, China Academy of Chinese Medical Sciences; Liyun He, China Academy of Chinese Medical Sciences; Yanhong Zhang, China Academy of Chinese Medical Sciences; Hongjiao Li,

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



China Academy of Chinese Medical Sciences; Xiaoying Lv, China Academy of Chinese Medical Sciences; Tiancai Wen, China Academy of Chinese Medical Sciences; Yanke Ai, China Academy of Chinese Medical Sciences

Nine hospitals and 27 acupuncturists were recruited to conduct research across the country. A total of 372 patients with chronic low back pain were registered and 348 cases were finally included in this analysis. ①Basic information of acupuncturists: 27 acupuncturists were mainly distributed in Beijing, with an average age of 38.83 ± 10.66 years, and an average career period of 12.38 ± 8.40 years. Among them, there were 13 doctors with senior professional titles. ②Basic demographic information of patients with low back pain: The average age of the patients included in the study was 48.71 ± 15.30 years old. 64.1% were female patients. The Han population accounted for 96.8%. 62.6% were distributed in Beijing. 87.4% were married. Among occupational distribution, the middle staff and students, retirees, and others distributed approximately one-third each, and 67.8% of the patients received higher education. ③Diagnosis: According to the anatomical location of the lesions diagnosed by the first disease, the lesion types were mainly disc lesions and soft tissue lesions, mainly lumbar disc herniation (55.5%), lumbar muscle strain (20.1%), Lumbar degenerative changes (11.2%), et al. Etiological diagnosis of traditional Chinese medicine were mainly kidney deficiency (39.1%), cold-dampness (38.8%), and blood stasis (35.1%). ④Acupuncture intervention: The treatment was mainly guided by the traditional Chinese medicine acupuncture theory. 88.5% of patients were applied local acupuncture points. The number of acupuncture points involved was usually within 10 acupuncture points, and the most used points were Shenshu (72.7%), Dachangshu (69.0%), Veizhong (62.1%), etc. 97.4% of patients had deqi, 67.2% were supplemented with TDP during acupuncture operation, and 14.1% had some special acupuncture procedures during the operation. The needle retention time was concentrated in 20-30 min. The number of acupuncture included in the observation patients was mostly concentrated in 3 times, and the frequency of acupuncture of 43.1% patients was once a week.

Long term effectiveness of sacral acupuncture for refractory overactive bladder

Poster Board #: 20

Hisashi Honjo, Kyoto Prefectural University of Medicine and Meiji School of Oriental Medicine; Atsuko Fujihara, Kyoto Prefectural University of Medicine; Tsuyoshi Iwata, Kyoto Prefectural University of Medicine; Munekado Kojima, Nagoya Urology Hospital; Osamu Ukimura, Kyoto Prefectural University of Medicine

Objectives: Acupuncture is one of the neuromodulatory therapies available. We have investigated and reported the effects of sacral acupuncture on overactive bladder (OAB). In this study we investigated the clinical usefulness of acupuncture for the treatment of refractory overactive bladder (OAB) in the short term outcome and long term outcome. **Methods:** A total of 65 patients (35 males, 30 females) with refractory OAB, who had been treated unsuccessfully with more than 3 medications, underwent sacral acupuncture, which was performed with disposable stainless steel needles inserted into the bilateral BL-33 (Zhongliao) points on the skin of the third posterior sacral foramina. Among them 17 patients were treated by acupuncture monotherapy due to side effects of pharmacotherapy, remaining 48 patients were treated by combination therapy with anticholinergic agents or beta-3 agonist. The following variables were measured for 24 months: Overactive bladder symptom score (OABSS), 3day bladder diary (BD). The initial treatment was repeated once a week for 8 weeks, the maintenance treatment was repeated once two or four weeks. **Results:** No side effects were recognized throughout the acupuncture treatment. Total OABSS score decreased significantly from 10.2 to 8.6 ($p < 0.03$), 7.9 ($p < 0.0005$), 7.1, 6.4 ($p < 0.0001$), 4, 8, 12, 24, 48 and 96 weeks following the initiation of acupuncture, respectively. Among the 4 items of OABSS, scores of daytime urinary frequency, urgency and urge incontinence significantly decreased 96 weeks following acupuncture, although the score of nocturnal urinary frequency did not change significantly. On the other hand, the average

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

voided volume did not change significantly overall treatment period. The treatment adherence of sacral acupuncture was 60% and 54%, 1 and 2 years following acupuncture, respectively (Figure). Conclusion: Sacral acupuncture could represent alternative therapy to the treatment of refractory overactive bladder in the long term period.



Manual or electroacupuncture as an add-on therapy to SSRIs for depressed patients with or without anxiety characteristics: secondary analysis of a randomized controlled trial

Poster Board #: 68

Bingcong Zhao, Beijing University of Chinese Medicine; Xinjing Yang, Beijing University of Chinese Medicine; Yang Sun, Beijing University of Chinese Medicine; Xingzhou Gao, Beijing University of Chinese Medicine; Shixing Feng, Beijing University of Chinese Medicine; Xiang Li, Beijing University of Chinese Medicine; Yufei Li, Beijing University of Chinese Medicine; Yahuan Li, Beijing University of Chinese Medicine; Tuya Bao, Beijing University of Chinese Medicine

Purpose: The effectiveness of pharmacotherapy and psychotherapy was not satisfactory in the treatment of anxious depression (AD). This study aimed to explore manual acupuncture (MA) or electroacupuncture (EA) added on selective serotonin reuptake inhibitors (SSRIs) on the treatment outcomes in depressed patients with or without obvious anxiety symptoms. **Methods:** 465 moderate to severe depressed patients were randomized to receive MA+SSRIs, EA+SSRIs, or SSRIs alone (1:1:1) for six weeks. The AD (n=374) and nonanxious depression (NAD, n=91) subgroups were divided by the anxiety/somatization factor score of 17-item Hamilton Depression Scale (HAMD-17). All the three groups were treated with usual dosage of SSRIs. MA and EA were given to the MA+SSRIs group and EA+SSRIs group respectively, three sessions per week. Primary outcomes were HAMD-17 early onset rate (week 1), response rate (week 6), and remission rate (week 6). **Results:** In the AD subgroup, the two acupuncture groups were significantly better than the SSRIs alone in early onset rate (MA+SSRIs: 42.2%, EA+SSRIs: 52.8%, SSRIs: 22.0%, $p \leq 0.001$), response rate (MA+SSRIs: 76.6%, EA+SSRIs: 79.7%, SSRIs: 56.9%, $p \leq 0.001$), and remission rate (MA+SSRIs: 31.2%, EA+SSRIs: 33.3%, SSRIs: 13.8%, $p \leq 0.001$), while no significant difference was observed between the two acupuncture groups ($p > 0.05$). In the NAD subgroup, the two acupuncture groups were significantly better than the SSRIs alone in early onset rate (MA+SSRIs: 62.1%, EA+SSRIs: 66.7%, SSRIs: 25.0%, $p < 0.01$), while the two acupuncture groups did not differ ($p > 0.05$). There was no significant difference among the three treatments in response rate (MA+SSRIs: 72.4%, EA+SSRIs: 86.7%, SSRIs: 75.0%, $p > 0.05$) and remission rate (MA+SSRIs: 44.8%, EA+SSRIs: 66.7%, SSRIs: 62.5%, $p > 0.05$). **Conclusion:** For patients with AD, added on MA and EA accelerated response to treatment, and enhanced therapeutic effectiveness. For patients with NAD, both add-on acupuncture treatments had a faster onset, but had limited effect on follow-up treatment.

Mechanisms of Topical Analgesics in Relieving Pain in an Animal Model of Muscular Inflammation

Poster Board #: 84

wanru duan, Chinese Academy of Medical Sciences; jie lu, Tibet Cheezheng Tibetan Medicine Co.,Ltd; yikuan xie, Chinese Academy of Medical Sciences

Background: There is limited understanding about topical analgesic on inflammatory muscle pain. Published studies so far only focus on depth penetration and effect at epidermis level with topical analgesic. This study is an attempt to understand basic mechanism of topical pain patch at dermis level and its effect on cutaneous C-fiber using animal

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



model. Objective: To investigate the mechanisms of topical herbal (XTT) patch in relieving pain during muscular inflammation in an animal model. . Methods. Adult Sprague-Dawley rats of both sexes were injected with complete Freund's adjuvant to induce inflammation in the anterior tibialis muscle of left hindlimb. One of two types of topical analgesics: Tibetan herbal Xiaotong Tiegao (XTT) patch, or Capzasin (CAP) cream containing 0.1% capsaicin, was applied to the skin over the inflamed anterior tibialis muscle. Pain behavioral tests, evaluation of plasma extravasation in the affected limb, and electrophysiological recordings of afferent nerve fibers were performed. Results. The behavioral experiments demonstrated that applications of either type of topical analgesic to the skin over the inflamed muscle significantly reduced pain, as indicated by the increased weight bearing capacity on the affected hind limb (with latencies average of 10 minutes for XTT and 1—2 hours for CAP). Both analgesics agents caused plasma extravasation in the affected skin. Electrophysiological recordings indicated that (XTT) topical analgesics selectively activated C-fibers, but not A-fibers. In addition, XTT decreased C-fiber afferent spontaneous firing rate in the nerve innervating the inflamed muscle. Denervation of the affected skin blocked the analgesic effects of both topical analgesics in inflammatory pain. Conclusion. Tibetan herbal patch (XTT) reduce the nociceptive input from inflamed muscles via a reflex mechanism by activating the cutaneous nociceptive afferents.

Medical QiGong Intervention for Improved Balance & Stability

Poster Board #: 72

James Stahl, Dartmouth-Hitchcock Medical Center; Shoshana Belisle, Dartmouth-Hitchcock Medical Center

PURPOSE: Osteoporosis, falls and fractures are significant health concerns for an aging population. Sedentary lifestyle and impaired neuromuscular function increase their risks. Previous research has shown activities such as Tai Chi improve strength, balance and coordination, and decrease falls, fractures and bone loss. The purpose of the current study was to determine whether a reproducible manualized Medical QiGong protocol would measurably improve balance, gait, and health self-confidence among older adults. METHODS: Study design: prospective intervention randomized wait-list controlled. Ninety-six (96) adults over 50 y.o. (mean 68 y.o. sd 9.1, range 51 - 96) were recruited through two US martial arts centers and were randomly assigned to either immediate start (N=53) or 4-week delayed start (N=43). The intervention was 12 weekly 1-hour group medical QiGong classes taught by certified QiGong instructors trained in the manualized protocol (10 QiGong forms). Data was collected at baseline, 1-month and 4-months. Primary outcome measures were the Community Balance and Mobility Scale (CBM) and Activities-Specific Balance Confidence (ABC) Scale. RESULTS: All groups demonstrated improved balance and gait (CBM + 10.95 points, $p=.0002$). This effect was strongest in the patients in their 60s and 70s. Balance self-confidence however did not significantly change (ABC + 2.9, $p=.4$), though some elements did come close to significant improvement, e.g., walk up/down ramp ($p=.07$), bend over/pick up ($p=.09$). Education level and income did not contribute. Current meditators trended toward improved ABC ($p=.17$) and the number of falls in the past year was negatively correlated with ABC ($p=.01$). High attrition (40.6%) and variable attendance may have influenced outcomes. CONCLUSION: A 12-week manualized Medical QiGong protocol led to objective improved balance and gait though only modestly improved balance self-confidence among adults over 50 y.o. Medical QiGong may be a useful clinical intervention for older adults at heightened risk for falls and related injuries.

Moxibustion for treating patients with hyperlipidemia: a systematic review and meta-analysis

Poster Board #: 99

Qin Yao, School of Acupuncture-moxibustion and Tuina, Beijing University of Traditional Chinese Medicine; Xinyue Zhang, School of Acupuncture-moxibustion and Tuina, Beijing University of Traditional Chinese Medicine; Yueping

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Huang, School of Acupuncture-moxibustion and Tuina, Beijing University of Traditional Chinese Medicine; Lue Ha, School of Acupuncture-moxibustion and Tuina, Beijing University of Traditional Chinese Medicine; Hao Wang, School of Acupuncture-moxibustion and Tuina, Beijing University of Traditional Chinese Medicine; Xin Hui, School of Acupuncture-moxibustion and Tuina, Beijing University of Traditional Chinese Medicine; Baixiao Zhao, School of Traditional Chinese Medicine, Beijing University of Traditional Chinese Medicine

Background and objective. Many trials have reported that moxibustion therapy is effective in lowering blood lipid levels (e.g. TC, TG, LDL-C, HDL-C) when treating hyperlipidemia. The aim of this systematic review is to assess the effectiveness and safety of moxibustion therapy for hyperlipidemia. **Methods.** We searched electronic databases for randomized controlled trials from inception to 1st April 2019. Revman 5.3 was used for data analysis with effect estimates presented as mean difference (MD) with 95% confidence interval (CI). We used a random effects model (REM) with significant heterogeneity ($I^2 > 50\%$) and a fixed effect model (FEM) with no significant heterogeneity ($I^2 \leq 50\%$) for pooling data. **Results:** Eleven studies with 717 participants were included. All trials were assessed as high risk of bias (poor methodological quality). For moxibustion compared to usual care alone, meta-analysis favored in TC level (MD 0.94mmol/L, 95%CI 0.73 to 1.15, $p < 0.00001$, 4 trials, $I^2 = 21\%$, FEM), TG level (MD 0.76 mmol/L, 95% CI 0.32 to 1.21, $P = 0.0007$, 4 trials, $I^2 = 64\%$, REM), and HDL-C level (MD 0.15 mmol/L, 95%CI 0.01 to 0.30, $p = 0.04$, 2 trials, $I^2 = 30\%$, FEM). One trial showed no significant difference in LDL-C level (MD 0.78mmol/L, 95% CI -0.02 to 1.58, $P = 0.06$) between moxibustion and usual care alone. For moxibustion compared to pharmacological medication, meta-analysis favored in TC level (MD 0.34mmol/L, 95% CI 0.03 to 0.65, 7 trials, $p = 0.03$, $I^2 = 56\%$, REM), and no significance were detected in TG level (MD 0.01mmol/L, 95% CI -0.30 to 0.32, $p = 0.95$, 7 trials, $I^2 = 80\%$, REM), HDL-C level (MD -0.06mmol/L, 95%CI -0.24 to 0.11, $p = 0.47$, 6 trials, $I^2 = 90\%$, REM) and LDL-C level (MD 0.00mmol/L, 95%CI -0.24 to 0.21, $p = 0.97$, 6 trials, $I^2 = 65\%$, REM). No serious adverse events were reported in 53 clinical trials of moxibustion treating hyperlipidemia. **Conclusions:** Moxibustion therapy might be an effective and safe treatment for hyperlipidemia, based on a low level of evidence. More high quality trials are needed in the future to draw a definitive conclusion.

Needling Sports Medicine Acupuncture®-defined channel sinews and its effects on assessments within the Postural Restoration Institute® (PRI) model of orthopedic assessment

Poster Board #: 30

Greg Lewerenz, Seattle Institute of East Asian Medicine,

[1. Purpose] The objective of this case series was to determine if acupuncture needling of the channel sinews, as defined by Sports Medicine Acupuncture®, could also affect orthopedic assessments within the Postural Restoration Institute® (PRI) model. [2. Methods] The cases utilized mainly Luo-Connecting points to treat Taiyin and Shaoyang channel sinews which correspond, respectively, to the PRI Humeral Glenoid Internal Rotation assessment and Adduction Drop Test. [3. Results] At the time of treatments, the PRI assessments improved 100% of the time but sustained improvement was less consistent between treatments. [4. Conclusions] By using the common language of channel sinews, PRI assessments are a potential way of differentiating patterns in Chinese medicine. As a result, acupuncture may be method of treating PRI patterns. Identifying and using the common language of orthopedic assessment in this context enhances the East Asian Medical Practitioner's ability to communicate and collaborate with non-East Asian medicine practitioners, such as physical therapists, massage therapists, and personal trainers, about a patient's health status. This enables interdisciplinary collaboration for immediate and long-term patient results, including supporting rehabilitation. Clinical outcomes may be improved collaborative care enhanced across disciplines. This case series demonstrated that acupuncture can have an objectively measurable effect on postural positioning of the human body. Western Postural Restoration® assessments, combined with East Asian medical

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

treatments via Sports Medicine Acupuncture® methods, enable measurable treatment efficacy and ongoing progress.



Neural Correlates of Improved Working Memory Performance by Volitional Breathing

Poster Board #: 15

Seulgi Eun, Department of Biomedical Engineering, Kyung Hee University, Yongin, Republic of Korea; Kyungmo Park, Department of Biomedical Engineering, Kyung Hee University, Yongin, Republic of Korea,

Although previous researches have shown neural mechanisms of impairment of in working memory (WM) performance by emotional distractors and growing number of investigations on breathing training (e.g., Qigong, Yoga) have provided evidences of its clinical benefits on emotional and cognitive disorders, the underlying neural mechanisms of those influences are still unclear. In this study, we investigated the neural mechanisms of volitional breathing in emotionally distracted WM task. Twenty-eight healthy young females (22.6 ± 2.8 years old) participated in our fMRI experiment. Participants performed three different delayed-response WM tasks which contained task-irrelevant picture distractor (IAPS), 1) emotional pictures (negatively affective and high arousal), 2) scrambled pictures for eliminating emotional components, or 3) emotional pictures but with volitional breathing. Then, WM performances and brain responses to distractors were compared between the tasks. Interestingly, by the volitional breathing which was deeper and slower, the reaction time was the most shortened and positively correlated with bodily self-consciousness processing areas (posterior insula and dorsomedial prefrontal cortex). Also, the volitional breathing induced brain signal decreases in emotional processing areas, sensorimotor and visual processing areas. By eliminating emotional component, the shortened reaction time was significantly correlated with brain signal decreases in visual processing areas. Our findings suggest different brain involvements to improve WM performance: the volitional breathing contributes to detaching bodily self from the emotionally distracting stimuli as well as disengaging the visual stimuli (signal decreases in visual processing areas) also found by eliminating emotional component. It can be speculated that the volitional breathing, as a coping strategy to overcome goal-irrelevant distraction, is more realistically applicable and efficient to improve cognitive function, even more than eliminating the distraction is.

Neural Correlates of Somatosensory Stimulation Gated Volitional Respiration

Poster Board #: 24

Minsung Kang, Department of Biomedical Engineering, Kyung Hee University, Yongin, Republic of Korea; Seulgi Eun, Department of Biomedical Engineering, Kyung Hee University, Yongin, Republic of Korea; Kyungmo Park, Department of Biomedical Engineering, Kyung Hee University, Yongin, Republic of Korea

It has been reported that the somatosensory stimulation which is gated by the exhalation period of spontaneous respiration reduced clinical pain correlated with cardiac outflow and brain functional connectivity. However, the somatosensory stimulation which is actively synchronized by subject's volitional respiration has not been investigated yet, to our knowledge. For our fMRI experiment, nineteen healthy young subjects (22.5 ± 2.7 years old, 6 females) participated in three different electroacupuncture stimulation tasks 1) for the Respiratory-gated Stimulus (RS), the stimulus was automatically given right after subject's spontaneous exhalation starts, 2) for the Stimulus-gated Respiration (SR), the subject breathed out volitionally to synchronize with the stimulus while the stimulus was given periodically considering subject's individual respiration rate, and 3) for control session (CTRL), the stimulus was given periodically same as SR session while the subject had spontaneous respiration. Each session had two 90 seconds stimulation blocks and three 120 seconds resting periods (total 9mins). In all three sessions, we found a

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



typical activation pattern by acupuncture stimulation which included signal increases in somato-sensorimotor area (S1, Premotor, SMA, posterior Insula) and Salience Network (anterior and posterior insula) and signal decrease in default mode network. Interestingly, SR showed more signal decrease in default mode network and greater activity in inferior frontal gyrus as well as somato-sensorimotor and attentional network compared to RS and CTRL even though acupuncture sensation (MASS) didn't have differences. For the cardiac outflow, while significant heart rate decreases were observed in stimulation blocks in RS and CTRL, there was no significant heart rate change in SR. According to the preliminary analysis, we found the volitional respiration in synchronization with acupuncture stimulation might induce greater sensorymotor/attentional responses and consequently relatively high sympathetic tone. Also, interestingly, we found more activation in inferior frontal gyrus which responds to human actions such as voluntary movements.

Neurotic personality specific study on psychological adjustment induced by Baduanjin based α and β band electroencephalogram power

Poster Board #: 19

Yu Guo, School of Acupuncture, Moxibustion and Tuina, Beijing University of Chinese Medicine; Qingchuan Hu, School of Acupuncture, Moxibustion and Tuina, Beijing University of Chinese Medicine; Jiakuan Lyu, School of Acupuncture, Moxibustion and Tuina, Beijing University of Chinese Medicine; Jian Yan, School of Acupuncture, Moxibustion and Tuina, Beijing University of Chinese Medicine; Yue Chen, School of Acupuncture, Moxibustion and Tuina, Beijing University of Chinese Medicine; Ying Wang, School of Acupuncture, Moxibustion and Tuina, Beijing University of Chinese Medicine; Jiamei Guo, School of Acupuncture, Moxibustion and Tuina, Beijing University of Chinese Medicine; Yulong Wei, School of Acupuncture, Moxibustion and Tuina, Beijing University of Chinese Medicine

Objective: to analyze the neurotic personality-dependent differences of the psychological adjustment induced by baduanjin (eight-section brocade) by comparing the changes of α and β electroencephalogram (EEG) power. **Methods:** college students were divided into different neurotic personalities group according to N scale (representing the neuroticism) in EPQ-RSC. All volunteers received baduanjin training. α and β EEG power of different groups was measured and compared before and after performing baduanjin. **Results:** according to the standard T score of the N scale, the subjects were divided into emotional stability personality group and intermediate personality group. **General comparison:** compare with before training, the absolute power of the α_1, α_2 and β_1, β_2 band were increasing in the intermediate personality group after training (all $P < 0.01$), while there was no significant difference in the absolute power of the α_1, α_2 and β_1, β_2 band of emotional stability personality group after training (all $P > 0.05$). **Spatial comparison:** The distribution of α_1 and α_2 bands in the intermediate personality group presented an increasing tendency on the whole brain region after training, especially in the parietal region, right occipital region, and posterior temporal region. And the distribution of β_1 and β_2 bands in the intermediate personality group also presented an increasing tendency on the most of brain region after training, especially in the parietal region and temporal region. While the distribution of α_1 in the emotional stability personality group presented an increasing tendency on the most of brain region after training, but the distribution of other bands in the emotional stability personality group presented an decreasing tendency on the most of brain region after training. **Conclusion:** "psychological adjustment" may be induced by baduanjin training in college students with different neurotic personality, which effect shows obvious personality specificity in the general and spatial changes of α_1, α_2 and β_1, β_2 bands power. This may be one of the brain regulating mechanisms that can comprehensively, effectively and positively improve the mental health of college students with different neurotic personality who practicing baduanjin training.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Non-invasive acupuncture (Auriculotherapy and Phytoacupuncture) for náusea/ vomiting in patients with cancer undergoing chemotherapy: Case study.

Poster Board #: 26

Mariana Lacordaire, IBRATE College; Ligia Fátima Simões, IBRATE College; Lirane Carneiro Suliano, IBRATE College; Rodrigo Andraus de Carvalho, UNOPAR University

Introduction: Cancer is the disease in which the mechanism of cell division and proliferation occurs beyond the needs of the tissue. In Oncology, complaints of side effects are linked to antineoplastic treatment, among them nausea and vomiting. Within the herbal medicine there are plants that help the patient to go through the treatment with the minimum of discomfort and adverse reactions. Acupuncture has therapeutic effects capable of complementing the drug therapy in cancer patients. Nausea is understood as an unpleasant sensation leading to a desire to vomit. Vomiting is a complex event characterized by the outflow of gastric contents. **Objective:** The goal of the present study was to evaluate the efficacy of noninvasive acupuncture in nausea and vomiting in a patient submitted to chemotherapy. **Methodology:** It is a descriptive and evaluative study, carried out at the Hospital do Câncer de Londrina, whose patients met the inclusion criteria and agreed to participate voluntarily in the study. The responses to treatment were evaluated by the Mini Mental Exam and the EORTC QLQ C30 questionnaire, specific for quality of life in cancer patients. **Results and Conclusion:** Based on the EORTC QLQ C30 questionnaire assessing the quality of life of cancer patients, it was observed that, after three interventions there was total remission of nausea and vomiting, as well as a 20% reduction in the overall symptomatology of the patient, thus, demonstrating that Acupuncture is effective in nausea and vomiting besides providing improvement in the quality of life to cancer patients. **Keywords:** Nausea; Vomiting; Auriculotherapy; Oncology.

Pain Management Barriers and Preferences for Acupuncture versus Medication: A Cross-Sectional Study of Academic and Community Cancer Patients with Pain

Poster Board #: 35

Kevin Liou, Memorial Sloan Kettering Cancer Center; Qing Li, Memorial Sloan Kettering Cancer Center; Gary Deng, Memorial Sloan Kettering Cancer Center; Jun Mao, Memorial Sloan Kettering Cancer Center;

Purpose: The opioid crisis has created challenges to treating cancer pain. Our study evaluated whether pain management barriers among cancer patients are associated with preference for acupuncture over medication to treat pain. **Methods:** We conducted a cross-sectional survey of academic and community cancer patients and assessed pain management barriers using the Barriers Questionnaire (BQ-13), which consists of two sub-domains: medication side effects and other barriers. Logistic regression was conducted to examine barriers associated with acupuncture preference. **Results:** Among 628 patients, 391 (62.3%) were younger than 65, 415 (66.1%) were female, 518 (82.5%) were White, 373 (60.0%) graduated college, 305 (48.7%) were taking opioids, and 373 (59.8%) had moderate-severe pain. Of note, 197 (31.4%) preferred to use acupuncture instead of medications for pain. The greatest pain management barriers were fear of addiction and medication side effects, specifically drowsiness, confusion, nausea, and constipation. Patients with acupuncture preference reported more pain management barriers as evidenced by higher BQ-13 total scores compared to the overall sample (2.62 vs 2.39, $P < 0.001$). This difference was driven by the medication side effect sub-domain with significantly higher scores on all sub-domain items: drowsiness, confusion, nausea, disinhibition, constipation, and general intolerance (all $P < 0.05$). In the other barrier sub-domain, the only barrier with significantly higher score among patients with acupuncture preference was

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



belief that medication cannot control pain (1.80 vs 1.43, $P < 0.001$). After adjusting for sociodemographic and clinical covariates, higher BQ-13 scores in the medication side effect sub-domain remained significantly associated with preference for acupuncture over medication (AOR 1.62, 95% CI 1.33-1.97, $P < 0.001$). Conclusion: Nearly a third of cancer patients prefer acupuncture over medications for pain. Our findings suggest that acupuncture could address unmet needs among cancer patients who experience barriers to pain management, particularly those who are less willing to take pain medications due to fear of side effects.

Phantom Acupuncture: Dissociation of Somatosensory and Cognitive/Affective Component of Acupuncture Effects in Functional Brain Connectivity

Poster Board #: 16

Seulgi Eun, Department of Biomedical Engineering, Kyung Hee University, Yongin, Republic of Korea; Jeungchan Lee, Athinoula A. Martinos Center for Biomedical Imaging, Department of Radiology, Massachusetts General Hospital, Charlestown, MA, USA; Changjin Jung, Clinical Medicine Division, Korea Institute of Oriental Medicine, Daejeon, Republic of Korea; Jieun Kim, Clinical Medicine Division, Korea Institute of Oriental Medicine, Daejeon, Republic of Korea; Jun-Hwan Lee, Clinical Medicine Division, Korea Institute of Oriental Medicine, Daejeon, Republic of Korea and Korean Medicine Life Science, University of Science & Technology (UST), Campus of Korea Institute of Oriental Medicine, Daejeon, Republic of Korea; Kyungmo Park, Department of Biomedical Engineering, Kyung Hee University, Yongin, Republic of Korea

An effective research methodology could dissociate multiple components which include somatosensory stimulation, treatment context, and attention to needle-based procedures in clinical setting. In fMRI setting with low back pain patients, our group used the phantom acupuncture, a visual manipulation which reproduces the acupuncture needling ritual without somatosensory tactile stimulation so that one cognitive/affective component induced by needling is dissociated from somatosensory component. Forty-three patients with low back pain were divided into the REAL group ($n = 25$) and the PHNT group ($n = 18$). They underwent two pain steady-state fMRI runs implemented by a low back extension (LBE) pain model (lifting the low back using air-cuff inflation) before and after REAL or PHNT stimulation. Subjective pain ratings, perceived throughout the LBE runs, were reported (LBEpain). The regions of interest were (1) the main nodes of the default mode network—the medial prefrontal cortex (mPFC), posterior cingulate cortex (PCC), (2) the main nodes of the salience network—the anterior/posterior insular cortices (a/pINS), and (3) the low back-specific region of sensorimotor network, S1back. Significant reductions in LBEpain were observed in both groups. In REAL group, decreased LBEpain was positively correlated with decreased functional connectivity between the mPFC and pINS ($r = 0.51$, $p < 0.05$). Reduced LBEpain in PHNT was negatively correlated with increased PCC–aINS connectivity ($r = -0.48$, $p < 0.05$) and tended towards positive correlation with decreased S1back–pINS connectivity ($r = 0.44$, $p = 0.07$). We found that the low back pain reduction in the real acupuncture and phantom acupuncture involved different functional brain connectivities. It would be speculated that detaching ‘self’ from the sensory aspect of pain contributes to pain reduction by real acupuncture, while shifting attention to ‘self’ and disengaging between pain-processing regions play an important role in phantom acupuncture.

Preliminary Efficacy and Safety of Reishi & Privet Formula (RPF) on Quality of Life Among Non-Small Cell Lung Cancer Patients Undergoing Chemotherapy: A Randomized Placebo-Controlled Trial

Poster Board #: 37

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

Jie Liu, Guang An Men hospital, Beijing, China; Jun J. Mao, Memorial Sloan Kettering Cancer Center, New York, NY; Susan Qing Li, Memorial Sloan Kettering Cancer Center, New York, NY; Hongsheng Lin, Guang An Men Hospital, Beijing, China



BACKGROUND: Improving quality of life (QOL) is one of the most important goals for patients living with non-small cell lung cancer (NSCLC) who receive chemotherapy. This study aimed to determine the preliminary efficacy and safety of Reishi & Privet Formula (RPF), a Chinese herbal formula for NSCLC patients undergoing chemotherapy. **METHODS:** We conducted a phase II randomized, double-blind, placebo-controlled clinical trial in China. Adults with NSCLC receiving either paclitaxel plus cisplatin (PT) or paclitaxel plus carboplatin (TC) were randomly assigned (3:1 ratio) to receive oral RPF (3.36 grams/day) or placebo every three weeks for two cycles. The main outcomes included the Functional Assessment of Cancer Therapy-Lung (FACT-L) and the MD Anderson Symptom Inventory (MDASI). RPF's safety profile was evaluated using the Common Terminology Criteria for Adverse Events. Changes in outcome measures from baseline to weeks 3 and 6 were assessed using a linear mixed-effects model. **RESULTS:** We enrolled 82 participants across eight centers; 70 provided at least one set of follow-up data and were included in the analysis. The mean age was 57 years (SD 8.6) and 48 (69.6%) were male. Compared to the placebo group, the RPF group had non-statistically significant higher QOL as measured by the FACT-G total score ($p=0.052$) and the FACT-L total score ($p=0.092$). MDASI symptom scores were not different between the two groups with the exception of the irritability score, which was lower in the RPF group than in the placebo group ($p=0.068$). Adverse events were similar between groups and included neutropenia, anemia, and hepatobiliary and renal disorders. **CONCLUSIONS:** This study demonstrated preliminary safety and suggests a promising trend in RPF's effect on improving QOL among NSCLC patients undergoing chemotherapy. Future adequately powered trials with longer follow-up are needed to verify the specific efficacy of RPF on improving QOL in cancer patients.

Preliminary Results of a Randomized Controlled Trial of Self-administered Acupressure for Symptom Management among Caregivers with Caregiver Stress

Poster Board #: 11

Denise Shuk Ting Cheung, The University of Hong Kong; Agnes Tiwari, Hong Kong Sanatorium & Hospital; Wing Fai Yeung, Hong Kong Polytechnic University; Lixing Lao, The University of Hong Kong

Purpose: The study aimed to evaluate the effects of a self-administered acupressure intervention on caregiver stress and related symptoms among caregivers of elderly family members. **Methods:** This is a randomized, wait-list controlled trial conducted from July 2016 to December 2018. Participants were randomly assigned (1:1) to either an 8-week self-administered acupressure intervention or a wait-list control group. The primary outcome is caregiver stress (Caregiver Burden Inventory). Secondary outcomes include depressive symptoms (Patient Health Questionnaire), fatigue (Piper Fatigue Scale), sleep disturbance (Pittsburgh Sleep Quality Index), and health-related quality of life (SF-12 Health Survey). **Results:** A total of 207 caregivers with caregiver stress were recruited, of which 6 participants (2.9%) withdrew from the study. Preliminary analysis was conducted among the participants who have completed the study. At post-intervention, as compared to the wait-list control group, the caregivers in the intervention group had a significantly lower level of caregiver stress (24.49 [SD = 20.12] vs 32.35 [SD = 16.30], $p = 0.003$), depressive symptoms (6.08 [SD = 5.60] vs 7.83 [SD = 5.60], $p = 0.03$), fatigue (1.45 [SD = 2.36] vs 2.31 [SD = 3.07], $p = 0.03$), sleep disturbance (7.07 [SD = 3.90] vs 8.26 [SD = 3.68], $p = 0.03$), and a higher level of physical component of health-related quality of life (45.67 [SD = 9.85] vs 42.71 [SD = 10.45], $p = 0.04$). **Conclusion:** Our preliminary findings support our hypothesis that self-administered acupressure can improve the caregiver stress and other associated symptoms in caregivers. Intention-to-treat analysis will be performed to conclude the findings.

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Progress and Application of Acupuncture and Moxibustion Clinical Research in China in the Past Ten Years

Poster Board #: 98

CHAO WANG, *China Academy of Chinese Medical Sciences*

Objective : To provide ideas and basis for the further research by learning the current situation on acupuncture and moxibustion clinical research and acupuncture and moxibustion related guidelines in past 10 years. **Methods:** With bibliometrics methods, clinical research in acupuncture and moxibustion in the source database(2008. 12. 1-2018.12.1)were searched. From the perspective of types of research design, populations-interventions-comparisons-outcomes (PICO) principles, disease entities and so on, quantitative analysis was used to review literature. **Results:** Papers including systematic reviews and meta-analysis and guidelines were screened out. **Conclusions :** From the literatures, the research diseases are expanding. The clinical research focus not only on pain but also on other diseases. Our study concluded that evaluation of Efficacy is still the main field of current research. After summarizing the current study and the weakness, this paper will be beneficial to the further clinical research to provide higher level evidence.

Psychophysiological effects of facial acupuncture in middle-aged females: A pilot counterbalanced cross-over study.

Poster Board #: 58

Koko Takatori, *Beauty Research Lab, C'BON COSMETICS Co.,Ltd.*; Kasumi Tamura, *Beauty Research Lab, C'BON COSMETICS Co.,Ltd.*; Mai Takase, *Research & Development Division, C'BON COSMETICS Co.,Ltd.*; Mariko Maebashi, *Research & Development Division, C'BON COSMETICS Co.,Ltd.*; Tasuku Yamazaki, *Department of Acupuncture and Moxibustion, Meiji University of Integrative Medicine*; Fumiko Yasuno, *Department of Acupuncture and Moxibustion, Department of Health and Medical Science, Tokyo Ariake University of Medical and Health Sciences*; Tadashi Yano, *Department of Acupuncture and Moxibustion, Meiji University of Integrative Medicine*

Background. The concept of using acupuncture for beautification purposes – often referred to as facial (cosmetic) acupuncture – have gained popularity worldwide. However, research is limited to its local effect, such as skin tone, wrinkles, and elasticity. Given that the essence of acupuncture treatment lies in the notion of Meridians, its systemic effects, and the idea of beauty as a result of whole body-mind wellbeing, this study aims to investigate the psychophysiological effects of facial acupuncture in middle-aged females using subjective and objective measures. **Method.** Ten healthy Japanese females (mean age 52.5 ±1.6) were randomly allotted to either a session of facial acupuncture condition or a control condition the first week, then received another condition the following week. Facial acupuncture condition consisted of placing disposable needles (Seirin® J15SP No.1, 0.16mm x 15mm) at the following acupuncture points for 10minutes: LI20, TE17, TE23, GV23, ST7, CV24, ST5, ST6, BL2, Ex-HN3, Ex-HN4, and Ex-HN14. A control condition consisted of laying at rest for 20 minutes. Physical symptoms and mental fatigue were assessed using the Visual Analogue Scale (VAS), and mood states were measured by Profile of Mood States 2nd Edition (POMS 2®) as the subjective values, and salivary analytes related to stress responses were obtained as the objective values before and after the treatment for each condition. 2-way ANOVA were performed to reveal the effects of facial acupuncture. **Results.** The salivary Dehydroepiandrosterone (DHEA) concentration after facial acupuncture showed significantly higher increase in comparison to the control condition. Moreover, significant improvements in the subjective measurement of mental fatigue (VAS), Fatigue-Inertia score, and the total mood

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



disturbance score were confirmed. Conclusion. These results indicated that facial acupuncture has both psychological and physiological systemic effects in middle-aged female. Further research is needed to explore its mechanism of action in the beautification processes.

Qualitative and Quantitative Analysis of Seven Volatile Oils from Moxa Floss in Different Years and Processing Proportions

Poster Board #: 71

xin hui, Beijing University of Chinese Medicine; hao wang, Beijing University of Chinese Medicine; baixiao zhao, Beijing University of Chinese Medicine

OBJECTIVE: In this study, by comparing the difference of volatile oil content in different quality of *Eichhornia argyi*, a method for identifying new and old *Eichhornia argyi* was explored. **METHOD:** The study collected 25 moxa floss samples with the time span of 10 years. This study uses gas chromatography and gas chromatography-mass spectrometry (GC-MS) to investigate the content of moxa volatile oils. Firstly, GC-MS was used to quantitatively analyze the volatile oil of Moxa floss. The peak area was used to determine the 7 components with higher content and more correlation in moxa floss. The external standard method was used to determine the content of the above 7 volatile oils (eucalyptol, thujone, borneol, α -terpineol, eugenol, caryophyllene and caryophyllene oxide) in moxa floss. **RESULT:** The results showed that the volatile oil content of the new moxa made from *Artemisia argyi* leaves stored for less than one year was relatively high, and the volatile oil content of aged moxa floss made from dried leaves for more than one year was low. Analysis of the trend of the content of each component showed that the content of eucalyptol, thujone, α -terpineol, eugenol, and caryophyllene in the moxa was basically decreased with the increase of year, and the caryophyllene oxide was slowly increased with the storage time, and the content was increased. The borneol is less stable, and there is no steady increase or decrease. **CONCLUSION:** In a short period of time after the production of moxa floss, new and aged moxa were significantly different, which can better distinguish aged moxa floss.

REINVENTING LIFE: DOCUMENTARY ON EXPERIENCES OF WOMEN WITH BREAST CANCER AND ACUPUNCTURE TREATMENT

Poster Board #: 45

ANA NOVAES, UFES; ELIANA ZANDONADE, UFES; MARIA HELENA AMORIM, UFES; ROMULO MUSIELLO FILHO, CEU AZUL

Objective: To present a audiovisual with the experience of women who had breast cancer. **Method:** The documentary tells the stories of women from the public oncological health service in Vitória, state of Espírito Santo, Brazil, between September 2015 and March 2016. A total of 23 users, aged 36-75, who were undergoing oncological treatment and acupuncture or on rehabilitation of breast cancer. Three focus groups and seven interviews were conducted. All the women signed previously the Term of Informed Consent and the authorization for the use of images. This project was approved by the Ethics Committee. It sought to explore the female universe, and what pervades and identifies these values. Understand the complexity of the encounter with breast cancer, extracting the uniqueness of each experience. A script of questions was elaborated so that they could answer the thematic developed in the script. All focus groups and interviews were filmed and later transcribed in full. All material has been carefully read. Then the most significant fragments of the reports for the first edition cut were highlighted. Next, poems were selected that were related to the context of the speeches and that could provide a poetic and reflexive pause, proceeding the final editing that was done by the director and the researcher. The soundtrack was

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



composed especially for the film. The film was previously screened for the women involved in the study who approved it. Results: A documentary was produced in DVD with two versions, one of 30 min that was subtitled to the English and another one summarized, with 10 min of duration. Both record, through the testimonies, issues related to current women, cancer, sexuality, treatment and acupuncture. The production complete team. Conclusions: The film allowed to demonstrate the complexity throughout the process of illness and the dimension of care with acupuncture.

Research on the correlated mechanisms between hypertension with Liver depression and anxiety-depression

Poster Board #: 74

Kimberly Coleman, Henan Univeristy of Chinese Medicine

The purpose of this study is to: analyze effects of Liver depression (LD) and anxiety-depression (AD) on the pathogenesis of hypertension (HTN) from Chinese medicine (CM) and psychosomatic medicine (PM) perspectives; attempt to clarify correlated mechanisms between AD and LD in HTN; extract common factors related to these two states; explore common mechanisms to establish integrated thinking and framework of two medical systems toward HTN; provide integrated CM and Western medicine (WM) standardization to incorporate methods for diagnosis and treatment of HTN; and make a beneficial attempt at integrating CM and WM theory and practice. Methods: By consulting literature and using clinical means of integrated CM and WM treatment of HTN, this study analyzes and validates the rationality and validity of the network structure, and forms a complete regulatory theory combining PM and WM. Theoretical, experimental and clinical research will be systematically reviewed to explore the mechanism of "course Liver, rectify qi" in treating HTN with LD, and analyze common factors and regulation points of PM's mechanism. The statistical analysis method mainly uses Spearman correlation analysis. Expected Result: fusion of CM's and PM's interpretation of negative emotion; correlation between interpretation of negative emotion related "syndromes" in PM and CM; identify the essence of LD as the basic functional mechanism of PM; compare LD and the essence of PM's corresponding process; the pathogenesis of HTN with LD based on PM, with correlated factors and neurotransmitter action points of CM intervention; mechanism of treating HTN with LD, with common factors and regulation of PM. Conclusion: This study attempts to prove the role of "Liver governs dredging" theory in the pathogenesis and prevention of HTN and its consistency with common factors and mechanisms of PM. It also aims to identify indexes included in CM's syndrome differentiation, to provide basis for this research.

Self-administered Acupressure for Knee Osteoarthritis in Middle-aged and Older Adults: A Pilot Randomized Controlled Trial

Poster Board #: 10

Denise Shuk Ting Cheung, School of Nursing, The University of Hong Kong; Wing-Fai Yeung, School of Nursing, Hong Kong Polytechnic University; Lixing Lao, School of Chinese Medicine, the University of Hong Kong

Objective To test the acceptability and feasibility of self-administered acupressure as an intervention for improving knee pain among middle-aged and older adults with osteoarthritis of the knee (KOA). Methods In this pilot randomised controlled trial, 35 participants with KOA were randomised to self-administered acupressure (intervention group; n = 17; two self-administered acupressure training sessions and self-practice for 6 weeks) or knee health education (control group; n = 18; two health education sessions about KOA management and self-care

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



for 6 weeks). Current pain intensity (primary outcome) was measured using a numeric rating scale (NRS) at baseline, week 1, week 2, week 4, and week 6 (post-intervention). Secondary outcome measures included worst and least pain intensity; range of motion of the knee joints, the Western Ontario and McMaster Universities Osteoarthritis index, and the Short Form-Six Dimension for health-related quality of life. Results Participants in both groups attended all training sessions. In the self-administered acupressure group, all subjects mastered the acupressure technique and passed the consistency check. Both groups showed a decreasing trend in current knee pain intensity by NRS at post-intervention. A medium between-group effect size (0.40) was found, but the between-group difference was not significant. The other secondary outcome measures were also comparable between both groups at post-intervention (all $P > 0.05$). Conclusions A 2-session self-administered acupressure training was acceptable and feasible among participants with KOA. A preliminary beneficial effect of self-administered acupressure for relieving pain in KOA was observed. Further trials with larger sample sizes and longer follow-up periods are warranted.

Spain is different. Or not?

Poster Board #: 104

Beltran Carrillo, Clinica Beltran Carrillo

The government of Spain, officially in November 2018, has begun a period of evaluation of unconventional therapies (including acupuncture), and in case of lack of scientific evidence, proceed to catalog acupuncture as a pseudotherapy and ban it in different health institutions. Despite of having their own previous favorable documentation on evidence and safety for acupuncture, the crusade has begun with negative repercussions on public opinion and health and education managers about acupuncture. The reason why we have gone from accepting acupuncture as a useful therapeutic tool to want to ban it in health centers and universities is analyzed. A review is made of the Spanish health legislation, the institutions of experts that review the evidence and safety, and of the different stakeholder groups. The government of Spain initially and exclusively receives advice from interrelated associations of skeptics, being the possible source of disinformation and bias. An inadmissible bias of opinion, resulting from misinformation, lack of rigor in the search for published scientific information or sectarian advice, has made the Ministries of Health and Science and some colleges of medical doctors and universities to commit a serious error at the time of trying to consider acupuncture as a pseudo therapy.

Spatial Specificity of the Effects of Acupressure on Blood Flow/Perfusion Measured by Laser Doppler Flowmetry.

Poster Board #: 32

Shin Lin, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Mario Elabd, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Mina Elabd, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine.; Tony Nguyen, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine; Monica Bayasgalan, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine; Michael Luu-Trong, Laboratory for Mind-Body Signaling and

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine; Trinh Do, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine; Eric Nguyen, Laboratory for Mind-Body Signaling and Energy Research, Department of Developmental & Cell Biology and Susan Samueli Integrative Health Institute, University of California, Irvine

How acupoints are functionally different from surrounding areas is an important question in acupuncture research. In this pilot study, we investigated the spatial specificity of the enhancement of blood flow/perfusion by acupressure on acupoints related to the heart (HT3/Shao Hai/Lesser Sea, HT7/Shen Men/Spirit Gate, PC6/Nei Guan/Inner Gate) and the eyes (ST2/Si Bai/Four Whites, GB14/Yang Bai/Sun White). Eight healthy male and female subjects of college age were measured in 5 experiments each with a laser Doppler flowmetry instrument (Moor DRT4) before (baseline) and after 3 minutes of acupressure applied by a researcher using the eraser end of a pencil. Blood flow/perfusion measured as “flux” at HT3 was increased to 1,422+195% (Mean+SE) of baseline after the acupressure treatment of the point produced “de qi” sensation. In contrast, when “sham points” 1 cm proximal, distal, medial, or lateral from HT3 were similarly treated, flux at these points increased to only 414+106%, 89+48%, 202+57%, or 351+108% of baseline, respectively. This pattern of higher flux at the acupoint compared to surrounding sham points ($p < 0.05$ for all comparisons) following acupressure treatment was observed at HT7 (668+149% versus 113+36%, 130+53%, 293+107%, 185+115%), PC6 (594+135% versus 127+27%, 128+37%, 129+43%, 131+33%), ST2 (337+120% versus 47+17%, 72+23%, 68+18%, 104+38%), and GB14 (658+234% versus 150+65%, 113+46%, 102+28%, 113+43%). These results showed that acupressure applied to all of the points tested resulted in significantly higher level of increase in blood flow/perfusion at acupoints compared to sham points in surrounding areas. It is also of interest that the observed elevation of blood flow is consistent with (a) the traditional use of the heart and pericardium acupoints for “moving” the blood and regulating heart function, and (b) the possibility that the use of the face points to remedy eye disorders might be due at least in part to improvement of local blood circulation.

Spinal adiponectin mediates electroacupuncture analgesia in a mouse model of inflammatory pain

Poster Board #: 87

Zhipeng Ning, The University of Hong Kong; Haiyong Chen, The University of Hong Kong; Lixing Lao, The University of Hong Kong

Purpose: To examine whether spinal adiponectin (APN) mediates analgesic effects of electroacupuncture (EA) in Complete Freund's adjuvant (CFA)-induced mouse model of inflammatory pain. Methods: Male C57BL/6 mice were divided into six groups ($n=3-6$ /group, respectively): 1. CFA+Sham EA, 2. CFA+EA, 3. CFA+APN, 4. CFA+Vehicle, 5. APN-KO+CFA+Sham EA, 6. APN-KO+CFA+EA. Inflammatory pain was induced on hand paw by subcutaneously injection of 0.02 ml CFA. EA of 10 Hz, 2.5 mA and 0.1 ms pulse-width at acupoint GB30 bilaterally was administered for 20 min within 2.5h post-CFA. Sham EA was performed with no-invasive needle taped on the skin of the point with no electrical current delivered. Recombinant mouse APN protein or vehicle was administered intrathecally at 7.5h post-CFA. Paw-withdrawal latency (PWL) and paw-withdrawal threshold (PWT) tests were used to measure pain sensitivity. Western blotting (WB) was used to detect protein expression of spinal APN. Results: Behavioral results showed EA improves pain sensitivity compared with sham EA (PWL: 5.1 ± 0.56 VS 3.8 ± 0.31 , $p=0.0008$; PWT: 1.5 ± 0.09 VS 1.1 ± 0.07 , $p=0.0064$). APN (10ng, intrathecally) also showed a strong analgesic effect compared with vehicle control (PWL: 6.5 ± 0.09 VS 3.5 ± 0.15 , $p < 0.0001$; PWT: 2.7 ± 0.31 VS 1.1 ± 0.13 , $p < 0.0001$). WB results showed EA could evoke an increased protein expression of spinal APN compared with sham EA at 5h (1.2 ± 0.05 VS 1 ± 0.02 , $p=0.0032$). Behavior tests indicated APN deletion could diminish the analgesic effects of EA. Conclusions: We

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



concluded that spinal APN may play an important role as an endogenous analgesic which mediates antinociceptive effects of EA. Acknowledgement: This study was supported by seed fund for basic research for resubmission of GRF/ECS proposals from The University of Hong Kong (Sep. 2018).

The anatomy of a channel: what makes a channel?

Poster Board #: 73

Victoria Choi, University of Technology Sydney; Deirdre Cobbin, University of Technology Sydney; Sean Walsh

HuangFu Mi's Zhen Jiu Jia Yi Jing (ZJJYJ) is regarded as the earliest text (282AD) on differential diagnosis and clinical acupoint therapy in Chinese Medicine (CM). This study examined CM clinical indications for 349 channel points for evidence of possible sequence associated patterns. The ZJJYJ laid out in detail the systematic definition and grouping of all acupoints termed 'Ruling Points' (RP) in relation to their unique patterns of signs and symptoms ('RP indications'), rather than as channel specific lists. RP indications for hundreds of clinical patterns for all channel acupoints were systematically categorised across six differential diagnostic books (Seven to Twelve). Two editions of the ZJJYJ were examined to identify all RP for 14 channels. RP indications for each acupoint were coded by ZJJYJ diagnostic Book and Chapter Part and examined for relationships between sequence position and diagnostic category of individual RP indications. While no single category of CM indications based on the RP diagnostic system was common to all 349 points, there were distinct patterns that grouped channels running over similar body regions, which involved clusters of RP indications associated with sequence positions. There were more RP indications at the extremities (i.e. hands and feet) and they tend to have a treatment effect that is proximal and systemic. For example, RP on the extremities were indicated for conditions like febrile states, headaches and delirium. For arm channels 49% of the RP were located at the hand and wrist, whereas the leg/body channel RP were more evenly distributed across the body regions: lower limbs (56%); torso (23%) and head (21%). There was a clear relationship between channel sequence position and RP indications and while there were specific clinical themes to each channel, all acupoints within a channel were indicated for a unique cluster of symptoms.

The Culture of Biomedicine: A Significant barrier to General Practitioners access to and communication of Complementary Medicine information

Poster Board #: 18

Amy Forth, Acupuncture Pregnancy Clinic Sydney

Abstract: The Culture of Biomedicine: A Significant barrier to General Practitioners access to and communication of Complementary Medicine information. Background: In Australia access to CM is primarily patient driven, with little intervention, advice or communication occurring via General practitioners (GPs). Despite the increasing presence of Complementary Medicine (CM) in Australia, little attention has been given to how GPs manage their patients' CM use and how GPs access CM information and communicate this to their patients. Methods: A mixed-method research design synthesised the results of survey data and interviews with a convenience sample of General Practitioners (GPs). GPs with and without an interest in Integrative Medicine (IM) were sought to enable a comparative analysis that aimed to identify social and cultural factors that may impact the access and communication of CM information. Descriptive and inferential statistics were used to analyse the quantitative data that was combined with a thematic analysis of the qualitative data that explored underpinning assumptions, beliefs and social phenomenon according to the Culture of Biomedicine. Results: Of the 135 survey respondents, 47 were IM-GPs and 88 conventional-GPs, and 9 (4 IM-GPs and 5 conventional-GPs) were interviewed. Significant differences in the attitudes, assumptions, and beliefs between the two groups impacted the GPs' access to and communication of CM information. The notion of

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

scientific evidence was not as 'black and white' as is often claimed within biomedical discourse. Social and cultural factors were found to determine access to, and acceptance of, information and evidence and also effect the communication of CM information. Further notable findings included firstly that conflicting beliefs surrounding the risks of CM impacted GPs access to CM information. Secondly, GP and IMGPs described vastly different experiences regarding CM communication. Conclusion: The social and cultural factors identified provide insights for future integrative healthcare strategies to improve GPs' access to and communication of CM information.



The effectiveness and safety of moxibustion for treating hypertension: a systematic review

Poster Board #: 95

Rui He, *Beijing University of Chinese Medicine*; Baixiao Zhao, *Beijing University of Chinese Medicine*

Hypertension can cause various cardiovascular and cerebrovascular diseases and become a major killer of human health. Moxibustion was widely used to control blood pressure and reduced the side-effect of antihypertension drugs in China. We conducted a systematic review to assess the effectiveness and safety of moxibustion for hypertension. Study selection, data extraction, quality assessment, and data analyses were conducted according to the Cochrane standards. The primary outcome was blood pressure. 9 randomized controlled trials with 811 participants were included. Four RCTs showed significant difference between moxibustion with antihypertensive drugs and antihypertensive drugs in SBP (MD -6.52, 95% CI -12.23~ -0.82, $P < 0.05$) and DBP (MD -5.51, 95% CI -9.60~ -1.42, $P < 0.05$). The effective rate was compared between the two studies (RR 1.15, 95% CI 0.95~ 1.38, $P > 0.05$). There was statistically significant difference between moxibustion versus antihypertensive drugs (RR 1.14, 95% CI 1.00~ 1.28, $P < 0.05$). We did not find adverse events related to moxibustion. The included studies were lack of randomized methodology and blinding performance. In conclusion, moxibustion might effectively lower blood pressure and improve effective rate based on the low-quality evidence. Current evidence reveals that moxibustion is a safe treatment with no adverse events. In order to get a reliable conclusion, more high quality and large sample size trials are needed in the future. This trial is registered with PROSPERO CRD42018100009.

THE EFFECTS OF ACUPUNCTURE IN THE ANXIETY LEVELS OF WOMEN WITH BREAST CANCER

Poster Board #: 46

ANA NOVAES, *UFES*; CAMILA SOUZA, *UNIFESP*; CHRISTOPHER ZASLAWSKI, *UTS*; ELIANA ZANDONADE, *UFES*; JOAO BOSCO SILVA, *Faculdade de Medicina de São José do Rio Preto*; JON ADAMS, *UTS*

Breast cancer has multi-dimensional aspects, representing the first mortality cause by neoplasia among women, and frequently triggering off conditions of anxiety, depression and fear, which have ever more being treated with Integrative and Complementary Medicine, which with the holistic ideal of care, aims at contributing to the traditional treatments. The objective of this study was to assess the effects of acupuncture in the treatment of anxiety in women with a diagnosis of breast cancer, and to examine the association with sociodemographic and clinical variables. This is a randomized clinical trial composed by 46 women with breast cancer, 22 in the experimental group, and 24 in the control group. The dependent variables were trait and state of anxiety, and the independent variable was intervention with acupuncture at the preoperative period of mastectomy. The State - Trait Anxiety Inventory (STAI) was used, and the following points: Nei Guan (PC6), Shenmen (HT7), Hegu (LI4), Zusanli (E36), Sanyinjiao (SP6), Taichong (LR3), Yintang, Baihui (DU 20), Jiuwei (REN 15), Shanzhong (Ren 17). After six acupuncture sessions, the average of the State of Anxiety in the experimental group was reduced in a significant way, while in the control group, there was an increase in symptoms. A significant reduction in the systolic pressure was observed in the

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title

experimental group, before and after needle sessions at the 1st and 3rd sessions, while cardiac frequency presented significant reduction in all sessions. It was evidenced that with the intervention with acupuncture was efficient for the treatment of anxiety in women with the diagnosis of breast cancer.



The role of Acupuncture on Inflammation in the pathogenesis of ischemic stroke

Poster Board #: 88

Jian Pei, Longhua Hospital, Shanghai University of TCM

More than 40% of stroke patients die within 1 week after onset or have long-term residual moderate to severe disability. The inflammatory reaction caused by infection after the onset is the main cause of serious consequences, and 20% of the in-hospital death or poor prognosis is caused by inflammation. Both pro-inflammatory and anti-inflammatory mediators are involved in the pathogenesis of ischemic stroke, an imbalance of which leads to inflammation. Inflammatory cells from both the innate and acquired immune systems are involved in ischemic stroke-related inflammation; processes that are linked by the action of interleukin-17A (IL-17A). Although most inflammatory cells promote inflammation, T regulatory cells (Tregs) may have a protective function at the early stages of an ischemic injury, but a negative role during later stages. However, the precise mechanism of inflammation in ischemic stroke remains elusive; further understanding of it may provide new ideas for the prevention and treatment of ischemic stroke. We study the role of pro-inflammatory and anti-inflammatory mediators and related immune cells in the pathogenesis of ischemic stroke. Acupuncture intervening in acute/ultra-early ischemic stroke have revealed that acupuncture therapy could regulate the inflammation; processes that linked to IL-17A, eliminate the inflammatory damage as well as recover the neurologic impairment. Supported by Shanghai Municipal Science and Technology Commission in China, No. 14401971300, 18401970500; the Key Program of Shanghai Municipal Health and Family Planning Commission in China, No. ZY(2018-2020)-CCCX-1006; the National Natural Science Foundation of China, No. 81603697

To compare the analgesic response of auriculotherapy in the treatment of cervicalgia using electro-puncture and laser puncture when evaluated by neuroimaging

Poster Board #: 7

Lirane Carneiro-Suliano, Federal University of Parana; Sandra Silvério-Lopes, IBRATE Technological College; Maria Lucia Jorge, Federal University of Parana; Juliana Lima, IBRATE Technological College; Rafaella Stradiotto Bernardelli, Pontifical Catholic University

Objective: To compare the analgesic response of auriculotherapy to cervicalgia treated by electro puncture and laser puncture and to evaluated with neuroimaging. To compare the analgesic response of auriculotherapy in the treatment of cervicalgia using electro-puncture and laser puncture when evaluated by neuroimaging Method: The sample consisted of 30 volunteers with tension neck pain, between the ages of 18 and 55 years, both genres, were submitted to 4 sessions of auriculoterapia, being group 1 model Laser II / PDT 600 nm, with 100 mW of power and 2 Joules. For group 2, the NKL Mark device, Omnipax model with pen type electro puncture, in 5 Hz continuous modulation, and 1 minute time for toning and continuous type modulation, 100 Hz and 2 minutes for sedation per point selected. The following acupoints will be standardized according to ATLAS mapping: shemmen, kidney, vegetative nervous system, muscle relaxation, analgesia, sub-cortex and cervical and / or neck. Both groups received 4 interval sessions once per week. The pain was assessed by the MCGILL questionnaires in the first and last

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



consultation and the neuroimaging was performed with neurometry. Results: After the fourth session it was observed that there was reduction of cervical pain tension origin in both groups, but in the statistical analysis the laser had a value of $p = 0.001$ and the electro puncture the value of $p = 0.012$. Conclusion: Electro puncture and laser puncture are recommended stimuli to treat tension cervicgia in auriculotherapy, but laser puncture was statistically significant. Electro puncture and laser puncture are recommended models of auriculotherapy for the treatment of cervicgia, but only the laser puncture showed statistically significant results.

Using Acupuncture to Treat Constipation and Sedation from Opioid Use for Chronic Pain Management-A Proposal for a Randomized Controlled Study

Poster Board #: 52

Kara Romanko, Highland Hospital

Opioid use in the on the rise. Patients with chronic pain are commonly prescribed opioid therapy and prescriptions written for oral medications (of any kind) are for opioids. Opioids have many side effects, two of the most common being constipation and sedation/fatigue. Western medicine management of these side effects usually involves decreasing the dose of opioid being taken, thereby decreasing the effectiveness of pain management therapy. This is a proposal for randomized controlled study which to investigate whether acupuncture can be a useful treatment for managing these side effects of opioid use for pain management, with the idea that this will not only decrease either constipation or sedation/fatigue but also improve the patient's quality of life allow an increase in the effect of the opioid therapy, leading to opioid sparing. The study should be conducted at 2 sites. There will be two study arms; one for constipation and one for sedation/fatigue. Each study arm will have a treatment arm and a delayed treatment arm. The study will last for 12 weeks with the treatment arm receiving acupuncture once per week for the first six weeks and the delayed treatment arm receiving acupuncture for the second 6 weeks, in order to compare the effectiveness of the treatment arm to the delayed treatment arm. In addition, this randomized controlled study will help explore the Chinese Medicine patterns seen in patients with these side effects, in order to determine what patterns will be used in a larger, investigational study. With this study we hope to show that acupuncture can, not only improve the lives of people on pain management treatment by improving their daily lives, but also that by eliminating these side effects and improving the body's function the absorption, and therefore effectiveness, of the pain management medications may be improved as well.

Utilizing TCM Cluster theory to Analyze Ehlers-Danlos Syndrome: A Connective Tissue Disease

Poster Board #: 81

Paige Pendarvis, New England School of Acupuncture at MCPHS; Lisa Conboy, New England School of Acupuncture; Lisa Taylor-Swanson, College of Nursing University of Utah

Background: Complex patients such as those with Ehlers-Danlos Syndrome (EDS) face a delay in diagnosis of 14-28 years (Kole et. al, 2009). EDS patients typically have many comorbidities that often go undiagnosed. While the current medical framework acknowledges co-occurring symptoms as symptom clusters, clusters of comorbid diseases are much less recognized. We propose applying cluster theory to these presentations in order to clearly group symptom and disease clusters. This framework is drawn from Traditional Chinese Medicine (TCM) which places significant emphasis on correlation or co-occurrence of symptoms. A dependence on only casual logic is a factor in delayed medical diagnosis. Cluster theory, rather than seeking only causal relationships between comorbidities, allows links between symptoms to be made more rapidly. The comorbidities for this subgroup of EDS

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



patients are highly complex and thus makes an ideal candidate for this theory. Methods: We used literature review to find that comorbidities of EDS span every body system and include such conditions as Chiari malformation, postural orthostatic tachycardia syndrome, mitral valve prolapse, fibromyalgia, dysmenorrhea, immune system dysregulation, cardiovascular dysautonomia, and exocrine gland dysfunction to name a few. In formulating these comorbid disease clusters we found data such as valve regurgitation in 25% of EDS patients (Castori et. al, 2012). In the absence of clinical signs, the recognition of the simple correlation of these comorbidities could assist a provider in earlier diagnosis. Conclusion: It is evident that reaching a holistic complete diagnosis of the complex patient is not an easy feat. This is especially challenging when rare conditions are involved. However, improving the theories that identify comorbid conditions is an urgent and necessary task. By supplementing our existing biomedical schema with the cluster theories utilized in TCM we could be able to reduce the delay in diagnosis for these complex patients.

Visualizing Motion Patterns in Acupuncture Manipulation

Poster Board #: 102

Younyoung Chae, Kyung Hee University

Acupuncture manipulation varies widely among practitioners in clinical settings, and it is difficult to teach novice students how to perform acupuncture manipulation techniques skillfully. The Acupuncture Manipulation Education System (AMES) is an open source software system designed to enhance acupuncture manipulation skills using visual feedback. Using a phantom acupoint and motion sensor, our method for acupuncture manipulation training provides visual feedback regarding the actual movement of the student's acupuncture manipulation in addition to the optimal or intended movement, regardless of whether the manipulation skill is lifting, thrusting, or rotating. Our results show that students could enhance their manipulation skills by training using this method. In this talk, I show the process of manufacturing phantom acupoints and discusses several issues that may require the attention of individuals interested in creating phantom acupoints or operating this system.

Where Acupuncturists are in MA, USA

Poster Board #: 77

Kai-Yin Hsu, NEG

Purpose: To understand where the acupuncturists are and characteristics in MA in the United States. Methods: Geographic information analysis by ArcGIS and descriptive statistics. Results: Acupuncturists in MA were mostly female and mean age was 53.23 years old. The most common practice office zip code was 02116. Conclusion: We found MA acupuncturist's sociodemographic characteristics and the geographic location on the MA map. Further study will focus on hot spots and geographic association to local health care resources.

Women's Sexuality with Oncologic Disease - contributions of integrative therapies - research project

Poster Board #: 48

Filomena Paulo, Hospital Centre Tondela Viseu; Manuela Ferreira, Polytechnic Institute of Viseu; Cândida Koch, Superior School of Nursing of Porto; Reginaldo Silva-Filho, Faculdade EBRAMEC

SAR 2019 CONFERENCE POSTER ABSTRACTS

Sorted by abstract title



Framework: Diagnosis of an oncological disease generates a critical condition that can have periods of aggravation, due to the side effects of the treatments and the possible relapses. In the context of treatment, integrative therapies can be used in combination with chemotherapy and surgical treatment, minimizing symptoms, promoting the strengthening of the immune system, and aiming for cure.

Objectives: To analyse the contributions of integrative therapies (acupuncture) to promote the sexuality of women with cancer.

Methods: A mixed study prospecting a sample of 300 women with oncological disease of the reproductive and gynaecological system followed in the external consultation of a hospital in the central zone of the country during 2019. In the first phase we will develop a quantitative, exploratory and descriptive study to evaluate the experience of women with cancer, using a questionnaire and the SABIS Scale (Sexual Adjustment and Image Corporal Scale), and a qualitative study through a Focus Group to understand, in a personal and subjective way, the main indicators of sexuality change. In the second phase, a quasi-experimental study will be developed with the construction, implementation and evaluation of the integrative model using acupuncture for the improvement of the general state and the experience of sexuality in a more satisfactory and healthy way.

Expected results: Based on the results obtained in the first phase of the study, the diagnosis of the situation will be the support of the second phase, allowing the construction and validation of a care plan involving integrative therapies, promoting the orientation and restoration of women's sexuality, in fundamental areas of their lives as the physical and the psychic dimensions.

Conclusion: We hope to obtain a demonstration of the efficacy in the use of integrative practices, particularly acupuncture, for the satisfactory experience of sexuality, and consequent improvement of the quality of life.