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isams 2019

International Scientific Acupuncture and Meridian Symposium

Emerging Healthcare Challenges, Innovative Ideas and Novel Solutions from Integrative Medicine

2019. 10. 05 (SAT) - 10. 06 (SUN)

GECE Convention, Seoul National University, Seoul, Korea

* Opening Reception: October 4 (Fri) | Gala Dinner: October 5 (Sat)

KIOM
KOREA INSTITUTE OF ORIENTAL MEDICINE

KOREAN ACUPUNCTURE & MOXIBUSTION MEDICINE SOCIETY

MAPI
Medical Association of Pharmacopuncture Institute

KPI KOREAN PHARMACOPUNCTURE INSTITUTE

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iSAMS 2019 Committee
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Welcome!

I would like to extend a warm welcome to you for joining the International Scientific Acupuncture and Meridian Symposium (iSAMS) 2019 today.

As the president of Korea Institute of Oriental Medicine (KIOM), I am honored that KIOM is co-hosting the iSAMS 2019 in Seoul, Korea, in collaboration with Korean Acupuncture & Moxibustion Medicine Society (KAMMS), Medical Association of Pharmacopuncture Institute (MAPI), and Korean Pharmacopuncture Institute (KPI).

As 'ageing population' and chronic conditions have risen as global health issues in the modern society, integrative medicine is drawing attention from all over the world. It is producing excellent outcomes in the prevention and treatment for not only chronic, geriatric or intractable diseases like migraine and pain, but also newly emerging health challenges to socio-psychological well-being such as depression and panic disorder. 'Constitutional biotype' and 'medical big data' approaches open a new window that we look at the mind and body from a different perspective. Therefore, integrative medicine is considered to hold the significant potential for the future of medicine and for the future of health care.

The theme of iSAMS 2019 is 'Emerging healthcare Challenges, Innovative Ideas and Novel Solutions from Integrative Medicine.' With this theme, iSAMS 2019 will be the right place that we can predict newly surfacing health issues, communicate innovative ideas, and finally create novel solutions. The organizers are expecting active discussions, debates, or arguments on how to research, practice, make policy and materialize the potential of integrative medicine to overcome health challenges that our world faces.

As the representative research institution for Korean medicine and a partner to the iSAMS, KIOM will try our best to share the cutting-edge knowledge on integrative medicine by constantly publishing the journal 'Integrative Medicine Research (IMR)'.

Personally, I am looking forward to meeting engaged researchers, clinicians and policy makers from all over the world at iSAMS 2019, and I wish a memorable conference to everyone.

Co-Chair of iSAMS 2019

Jong Yeol KIM

President of Korea Institute of Oriental Medicine (KIOM)

WELCOME

Distinguished speakers and participants,

The Korean Acupuncture and Moxibustion Medicne Society, KAMMS, founded 1973 in SEOUL, is so glad and proud to welcome you all and to take co-responsibility of the The International Scientific Acupuncture and Meridian Symposium(iSAMS) 2019 on 'Emerging Healthcare Challenges, Innovative Ideas and Novel Solutions from Integrative Medicine'.

KAMMS is a representative korean academic organization of Korean Medicine and its official, historical and international journal is "The Journal of Acupuncture Research (JAR)", founded in 1983, which aims to strengthen the scientific understanding of the safety and effectiveness (efficacy) of acupuncture and related therapies in integrative medicine as well as in traditional medicine.

As people grow older and non communicable chronic diseases(NCD) become more widespread globally, a health system that is well based on primary care is urgently needed. Moreover, Importance of applying Traditional Medicine and its useful treatment methods such as acupuncture, moxibustion, cupping, pharmacopuncture, herbal medicine, etc. is growing ever bigger to compensate for limitations of the conventional medicine.

We hope that Acupuncture and its related therapies would overcome challenges scientifically standardizing and increasing the evidence level and participate mainstream health care system, maintaining public health care system worldwide.

In this perspectives, We wish all participants an exciting conference, enriching discussions, new ideas and experiences and particularly lots of enjoyable moments in Korea.

Co-Chair of iSAMS 2019

Ho Sueb SONG

President of Korean Acupuncture and Moxibustion Medicine Society (KAMMS)

Welcome!

We invite you to join iSAMS 2019.

It is my honor to co-chair iSAMS2019 again, since I was a co-chair with Dr. Longhurst at iSAMS 2011, the first iSAMS,

This iSAMS is an international academic conference where scholars from home and abroad gathers together for academic presentations and discussions on oriental medicine, medical science, pharmacology, alternative medicine, acupuncture & moxibustion and pharmacopuncturology. Through this academic conference, the globalization of pharmacopuncturology and the convergence of modern science have been achieved. Also iSAMS has enhanced its status as a meeting place for world renowned scholars.

Although there have been international academic conference based on oriental medicine prior to iSAMS. But under the banner of globalization of oriental medicine and the world spread of pharmacopuncturology, iSAMS has been held more faithfully than any other international conferences with the hosting of the Korean Pharmacopuncture Institute(KPI) and Medical Association of Pharmacopuncture Institute(MAPI). And at present, it has grown up as a leading Korean medicinal international academic conference in which many scholars participates voluntarily.

The theme of this iSAMS 2019 is "Emerging Healthcare Challenges, Innovative Ideas and Novel Solutions from Integrative Medicine". It is going to be the time to present and share about the up-to-date research trend around the importance of oriental medicine in primary health care, versatility in clinical use, usefulness of pharmacopuncture and acupuncture & moxibustion treatment in veterinary medicine.

Based on the confidence of its achievements, the Korean Pharmacopuncture Institute(KPI) and Medical Association of Pharmacopuncture Institute(MAPI) are jointly holding the event with Korea Institute of Oriental Medicine(KIOM), which is a national research institute, and with Korean Acupuncture & Moxibustion Medicine Society(KAMMS), which is a Korean professional society of Acupunture & Moxibustion. They will make joint efforts for the SCI listing of academic journals that will reinforce the status of oriental medicine in the future.

I look forward to seeing all the people I have met at iSAMS event previously and will endeavor to make iSAMS 2019 a memorable event for all of you.

Co-Chair of iSAMS 2019

Tae Han YOOK

Representative of Medical Association of Pharmacopuncture Institute (MAPI) &
Korean Pharmacopuncture Institute (KPI)

iSAMS 2019 Seoul, Korea

The International Scientific Acupuncture and Meridian Symposium (iSAMS) was established to provide a platform exchanging information and having discussion between scholars to enhance the quality of Oriental medicine research and to form an international research network. The iSAMS is intended to be a dynamic meeting that focuses on bringing together the most up-to-date information and the experiences of researchers, practitioners in the field of integrative medicine, and the public. The iSAMS has been held yearly on a different continent and is recognized as the premier international conference in the rapidly growing field of pharmacopuncture. Scholars from more than 20 nations have participated in the annual conferences, and over 200 lectures have been given.

"International Scientific Acupuncture and Meridian Symposium"

iSAMS 2019 Committee

KIOM

Korea Institute of Oriental Medicine (KIOM) is a state-run research institute under the Ministry of Science and ICT in the Republic of Korea and a national hub of research and development for traditional Korean Medicine (KM). The institute has also been designated as a WHO Collaborating Center for Traditional Medicine since 2011.

Korean Website: https://www.kiom.re.kr/
English Website: https://www.kiom.re.kr/eng/

KAMMS

Korean Acupuncture & Moxibustion Medicine Society (KAMMS) is a research group of the theory and technology of Acupuncture & Moxibustion, with the aim of contributing to the development of the Korean traditional medicine community. Projects on the publication and collection of Acupuncture & Moxibustion related journals and books, holding national academic competitions and seminars, and tasks delegated by the academic committee. Other projects concerning the achievement of the purpose of the plenary session shall be designated as the main projects.

Korean Website: http://www.kamms.org/

MAPI

Medical Association of Pharmacopuncture Institute(MAPI) is an authorized academic society composed of Korean Oriental Medical Doctors, to prove scientifically and to systematize academically the excellence and safety of the pharmacopuncture from natural substances.

Korean Website: http://yakchim.org/
English Website: http://yakchim.org/eng/

KPI

Korean Pharmacopuncture Institute(KPI) was charted in 1990 to govern the safety of Pharmacopuncture and to modernize its clinical applications. Furthermore, a research center with a clean room, 1A Zone, was established for safe production of herbal extracts and for the development of a wide variety of herbal medications. Many researchers are now actively involved in obtaining state-of-the-art data on the safety and the efficacy of pharmacopuncture.

Korean Website: http://www.pharmacopuncture.co.kr/
English Website: http://www.pharmacopuncture.co.kr/main_eng/main.html

Executive Committee

Jong Yeol Kim	Co-Chair, President of KIOM
Ho Sueb Song	Co-Chair, President of KAMMS
Tae Han Yook	Co-Chair, Representative of MAPI & KPI

Scientific Committee

Jun Sang Yu	MAPI / Sangji University
Dongwoo Nam	KAMMS / Kyunghee University
Myeong Soo Lee	KIOM
Jun-Hwan Lee	KIOM
Yeonhee Ryu	KIOM

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Korean Website: http://www.mohw.go.kr/react/index.jsp
English Website: http://www.mohw.go.kr/eng/index.jsp

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The Association of Korean Medicine

Korean Website: http://www.akom.org/Home/Main
English Website: http://www.akom.org/English/Index

SKOM

Korean Website: http://www.skoms.org/
English Website: http://www.skoms.org/eng/

Sponsor

AJ Herbal Medicine Dispensary

Korean Website: http://ajpharmacopuncture.co.kr

Seoul National University

Seoul National University honors the ideals of liberal education and aims to teach students a lifelong love of learning that will form the basis for continuous personal growth.

At the same time it is committed to preparing students to work and live in an increasingly competitive global environment. As South Korea's first national university, Seoul National University has a tradition of standing up for democracy and peace on the Korean peninsula.

Graduates have long served as public servants in key positions of the Korean government. In teaching, research, and public service, Seoul National University continues to set the standard of excellence.

The mission of Seoul National University in the twenty-first century is to create a vibrant intellectual community where students and scholars join together in building the future. As Korea's leading research university, Seoul National University is committed to diversifying its student body and faculty, fostering global exchange, and promoting path-breaking research in all fields of knowledge.

Location

38 building (GECE Convention Center), Seoul National University

By car

Go straight on the main gate of Seoul National University and enter Gate 5

By Public Transportation: Get off at Seoul National University entrance station or Nakseongdae station (Subway Line 2)

Seoul National University entrance station Exit 3

- Bus 5513 (get off at the entrance of the Engineering College)
- Bus 5511 (get off at the new materials joint research institute)

Nakseongdae Station Exit 4

- Village bus no. 02 (get off at the Research Institute of Advanced Materials)

GECE Convention Center(38 building), Seoul National University

October 5-6th, 2019

The Global Education Center for Engineers (GECE) was established in 2009 with funding from the Ministry of Education, Science, and Technology, Republic of Korea.

Based at the College of Engineering, Seoul National University, GECE connects engineering schools around the country to offer a comprehensive Global Engineering Education Program. GECE aims to be a leading institution in training engineers with excellent research and executive capabilities contributing to our national competitiveness.

Korean Website: http://snu38.snu.ac.kr/convxe/index.php

1. Hoam Faculty House

Since its inception in 1990, the Hoam Faculty House (HFH) has always stood by Seoul National University (SNU) noted for Korea's intellectual epicenter. As SNU's best support entity for education and research activities, it is well equipped with medium and large-sized meeting rooms for diverse conferences and events, restaurant for supply of safe and healthy food, and comfortable lodging facilities. Moreover, it runs a gallery for displaying works of notable artists, holds various concerts enjoyable for everyone, and undertakes ongoing renovations across installations and interior design, thereby evolving into a multiple cultural space where all visitors can build fond memories of their own.

Korean Website: http://www.hoam.ac.kr/

English Website: http://www.hoam.ac.kr/eng/

2. Four Points by Sheraton Seoul, Guro

Newly renovated hotel at Digital Venture Valley, SW of Seoul

Heart of Digital Complex Guro District of Seoul, Korea surrounded by authentic food culture, shopping, lively streets, and near by ecological park. Representing as transportation hub with Airport Limousine station at the entrance of the hotel, public transportation, easy access to major Seoul Subway Line 1,2,7 & 30-minutes from Gimpo International Airport(GMP), and 45-minutes from Incheon International Airport(ICN). All-day dining restaurant (136-seats) located on Second floor overlooking the city featuring fresh seasonal locally-grown ingredient. Menu options vary from classic comfort bite to buffet with live station excitement. Private dining rooms (3-rooms) can hold from 25 to 50 people. Café & Bar 72 carries morning coffee to start your day to local brewer beer to unwind.

Korean Website: https://www.marriott.co.kr/hotels/travel/selfu-four-points-seoul-guro/

English Website: https://www.marriott.com/hotels/travel/selfu-four-points-seoul-guro/

ACCOMMODATION

3. Le Meridien Seoul Hotel

In the heart of Seoul's iconic Gangnam District, Le Meridien Seoul is an ideal base for discovering the local area's distinctive blend of the ancient, the cultured and the vibrant-where temples and malls, galleries and parks, sports and music, all provide a sensorial experience in a vibrant setting. Nearby attractions include Bongeunsa Temple, COEX Exhibition Center and Mall and Jamsil Baseball Stadium. A new chapter in luxury lifestyle begins.

Korean Website: https://www.marriott.co.kr/hotels/travel/selmd-le-meridien-seoul/

English Website: https://www.marriott.com/hotels/travel/selmd-le-meridien-seoul/

4. Shilla Stay Guro

Hotel Shilla's premium business hotel brand, the Shilla Stay, has been launched in the Guro district which has positioned itself as the leading hub of IT venture businesses and mecca if the digital in Korea.

Korean Website: http://www.shillastay.com/guro/index.do

English Website: http://www.shillastay.com/guro/index.do

iSAMS 2019 Poster Awards

Five awards will be given to the posters on basic and clinical researches, which are only presented during the end of the iSAMS. All winners should be present in the Closing Ceremony to be awarded.

The selection criteria of poster award is grounded on originality, excellency of research results, contribution to traditional medicine and whether the poster is systematically organized.

Rank	Amount
1st	$ 2000 USD
2nd	$ 1000 USD
3rd	$ 500 USD
4th	$ 500 USD
5th	$ 500 USD

Poster Awards will be presented at the closing ceremony of the iSAMS 2019 Sunday, October 6th, 2019 around 17 pm

Social Events

Opening Reception

Friday, Oct 4, 2019 17:30
Rakgujung, B1, 38 building(GECE Convention Center), Seoul National University

Gala Dinner

Saturday, Oct 5, 2019 18:00
Rakgujung, B1, 38 building(GECE Convention Center), Seoul National University

Oct 4th (Fri), 2019

Time	Rakgujung
17:30	Opening Reception (Rakgujung)

Oct 5th (Sat), 2019

1st Day of Symposium (GECE Convention, SNU- Building 38)

Time	Room 520	Room 517	Room 519
09:00-10:00	Registration		
10:00-10:30	Opening Ceremony (520)		
	Keynote Speech 1&2 (Room 520) *Chair: Ho Sueb Song*		Poster Exhibition
10:30-11:00	* [Keynote Speech 1] (520) Chronic Pain Biotypes Predict Differential Analgesic Response to Verum and Sham Acupuncture *Richard Harris*		
11:00-11:30	** [Keynote Speech 2] (520) Self-Regulation of Pain through Acupuncture, Peripheral Neuromodulation, Mind-Body Intervention, and Imagery *Jian Kong*		
11:30-12:30	Lunch (Rakgujung)		
	Session 1: Bigdata and Traditional Medicine *Chair : Sang Hun Lee*	Session 4: Laser Acupuncture *Chair : Insoo Jang*	12:30-13:30 (60min) Poster Presentation *Chair: Tae Han Yook*
12:30-12:50	Limitations and Solutions of Traditional Medical Big Data Construction *Sang Hun Lee*	The clinical application of laser in Korean medicine: Laser acupuncture, moxibustion and others *Insoo Jang*	
12:50-13:10	The Methodological Trends of Traditional Herbal Medicine Employing Network Pharmacology Methods *Chang-Eop Kim*	Light Therapy and Mechanism of Laser Application *Changsop Yang*	
13:10-13:30	A Clinical Real-World Evidence Sharing Platform Over the Globe *Rae Woong Park*	What is the high level laser? *Hyungsik Seo*	
13:30-13:50		The History of CO_2 Laser Acupuncture and Moxibustion *Seungho Sun*	Poster Exhibition and Evaluation
	Session 2: Current Integrative Oncology and Immunotherapy *Chair : Rak-won Choi*	Session 5: Neurobiological Actions of Acupuncture Treatment in Pain Control *Chair : Hi-Joon Park*	
14:00-14:20	A Prospective Cohort Study of TCM integrated Scheme in Treating Non-small Cell Lung Cancer Patients *Honggang Zheng*	Mechanisms of Acupuncture Analgesia in Mice Pain Models *Yi-Wen Lin*	

1st Day of Symposium (GECE Convention, SNU- Building 38)

Time	Room 520	Room 517	Room 519
14:20-14:40	Pancreatic Cancer Pain Treatment with Acupuncture *Hao Chen*	Acupuncture Point: One Form of Neurogenic Inflammation in Skin *Hee Young Kim*	Poster Exhibition and Evaluation
14:40-15:00	Cordycepin Inhibits Human Ovarian Cancer by Inducing Autophagy and Apoptosis through Dickkopf-Related Protein 1/b-Catenin Signaling *Hwaseung Yoo*	Electroacupuncture in Essential Hypertension: Over-Excitation of Sympathetic Tone *Stephanie C Tjen-A-Looi*	
15:00-15:20	Electric Moxibustion for Upper-Limb Lymphedema in Breast Cancer Patients *Kyungsun Han*	Bee venom stimulation of a lung meridian acupoint reduces inflammation in a mouse model of carrageenan-induced pleurisy *Hoon-Seong Choi*	
	Session 3: Clinical Research I	Session 6: Neural Mechanisms of Acupuncture Action in Human	
	Chair : Myeong Soo Lee	*Chair : Younbyoung Chae*	
15:30-15:50	Enhanced Therapeutic Treatment of Colorectal Cancer Using Surface-Modified Nanoporous Acupuncture *Su Il In*	Applying the Power of the Mind in Pain Management *Jian Kong*	
15:50-16:10	Complex Approach to the Chronic Migraine Treatment: Connection Between Western and Oriental Medicine *Anna Kamavosyan*	Personalized Self-Acupressure for Pain and Co-Occurring Symptoms in Cancer Survivors: Efficacy and Mechanism *Richard Harris*	
16:10-16:30	Results of Comparison of Indicators of Clinical-Neurological, MRI, Auricular and Su-joke Diagnostics in Patients with Vascular Diseases of the Brain *Olga Kovalenko*	Beneficial Role and Neural Correlates of Volitional Breathing in Acupuncture, Qigong and Self-Training *Kyungmo Park*	
16:30-16:50	A Synergistic Effect of Combination of Acupuncture and Herb on the Methamphetamine's Reinforcement *Bong Hyo Lee*	Somatotopically Specific Primary Somatosensory Connectivity to Salience and Default Mode Networks Encodes Clinical Pain *Jieun Kim*	
17:00-18:00			
18:00	Gala Dinner (Rakgujung)		

Oct 6th (Sun). 2019

2nd Day of Symposium (GECE Convention, SNU- Building 38)

Time	Room 520	Room 517	Room 519
09:00-10:00	Registration		
	Session 7: Acupuncuture & Pharmacopuncture Practice	Session 11: Saam Acupuncture Method	Session 16: Manipulation Methods
	Chair : Young-Il Kim	*Chair : Dongwoo Nam*	*Chair : Gi-Young Yang*
10:00-10:30	Efficacy and Safety of Thread Embedding Acupuncture for Chronic Low Back Pain: A Randomized Controlled Pilot Trial *Hyun-Jong Lee* clinical training	10:00-10:50 Principle of Saam Five Element Acupuncture *Sanghoon Lee*	10:00-10:40 Clinical Acupotomy treatment *Geon-Mok Lee*
10:30-10:50	Amyotrophic Lateral Sclerosis treatment using Acupuncture, Pharmacopuncture and Herbal medicine (Mecasin) *Sungchul Kim*		10:40-11:20 Acupotomy Treatment of Patients with Ossification of Posterior Longitudinal Ligament by RSN Acupuncture *Myung-Seok Ryu*
10:50-11:20	10:50-11:50 Pain Treatment: The Scalp-Luò Technique *Mauro Devecchi*	A review of clinical researches on Saam acupuncture *Joo-Hee Kim*	
11:20-12:00		Session 12: Editorial-in-Chief Meeting of JAMS, JoP, IMR and JAR *Chair : Myeong Soo Lee* 11:20-11:40 Chief Editors of JAMS, JoP, IMR and JAR *Pan-Dong Ryu, Hyun-Min Yoon, Myeong Soo Lee, Ho Sueb Song*	11:20-12:00 Chuna technique of Scoliosis and Variation of Upper Cervical Vertebra due to TMJ Disorder *Seon-Hee Lee*
12:00-13:00	Lunch(Rakgujung)		
	Session 8: Acupuncture & Moxibustion	Session 13: Sasang Acupuncture Method	Session 17: Various Chuna Techniques
	Chair : Mi-Suk Kang	*Chair : Jun Sang Yu*	*Chair : Yong-Hyeon Baek*
13:00-13:20	Acupuncture and Moxibustion in Sports Injuries *Benedict Francis Valdecanas*	13:00-13:40 An Introduction to Taegeuk Acupuncture *Jae-kyu Kim*	13:00-13:30 Chuna Therapy on Facial Nerve Palsy *Jae Soo Kim*
13:20-13:40	Review on Korean Medicine clinic at polyclinic during 2019 FINA World Championships *Hyun-Joon Lee*		
13:40-14:00	Acupuncture and Related Therapies for the Management of Psychological and Psychiatric Disease: From Ancient Healing Art to Modern Sciences *Zhang-Jin Zhang*	Acupuncture Treatments Based on Constitution Classification *Byunghee Koh*	13:30-14:00 Frequent chuna techniques of lumbar spine and pelvic girdle *Hyun-Jong Lee*

2nd Day of Symposium (GECE Convention, SNU- Building 38)			
Time	**Room 520**	**Room 517**	**Room 519**
14:00-14:20	Characteristics of and Changes in Biopotentials on the Skin at Acupuncture Points Due to Acupuncture Stimulation *Seong Jin Cho*	A Study on Establishing the Sasang Constitution Acupuncture Method through Reviewing Research *Suzy Han*	14:00-14:30 Frequent chuna techniques of cervical and thoracic spine *Eun-Seok Kim*
	Session 9: Veterinary Acupuncture	**Session 14: Clinical Guideline**	**Session 18: Various Acupuncture**
	Chair : Min Su Kim	*Chair: Myeong Soo Lee*	*Chair : Sang-Hoon Lee*
14:30-14:50	Primo Vascular System in Animals, its Characteristics and Clinical Application *Kwang-Sup Soh*	Are clinical practice guidelines including acupuncture in your country appropriate and valid? *Hitoshi Yamashita*	14:40-15:00 Exploring acupoint selection patterns for pain control: Data mining of randomised controlled clinical trials *Yechae Hwang*
14:50-15:10	Do or Don't: Acupuncture Treatment for Cancer Patients *Keum Hwa Choi*	Development of Korean Medicine Clinical Guideline for Non-specific Chronic Low Back Pain *Dongwoo Nam*	
15:10-15:30	The Ameliorating Effect of Pharmacopuncture in Chemotherapy-Induced Neuropathy *Seo-Yeon Yoon*	Strategic Integration of Traditional and Complementary and Integrative Medicine into Clinical Practice Guidelines *Susan Arentz*	15:00-15:20 Kiiko Matsumoto's Clinical Strategies *Julie Lim Greif*
15:30-15:50	Release of Mesenchymal Stem Cell Induced by Electroacupuncture Stimulation in Central Nervous System *Min Su Kim*	Korean Medicine Clinical Practice Guideline for Knee Pain *Wonsuk Sung*	15:20-16:00 Practice of Nagano Method Acupuncture Treatment *Koji Nagano* *Yoichi Morizane* Japanese-English Translation Provided clinical training
	Session 10: Cannabis Research	**Session 15: Clinical Research II**	
	Chair : Su-Dong Kim	*Chair : Jun-Hwan Lee*	
16:00-16:20	Therapeutic Implications of Cannabidiol for Humans *Sang-Hyuck Park*	Case Study Projects by a Korean National Research Agency: Past 12 Years and Future *Sungha Kim*	16:00-16:30 Acupuncture for patients with traumatic multiple rib fractures: a single-centre experience *Kun Hyung Kim*
16:20-16:40	Cannabinoid Synthesis and Accumulation in Glandular Trichomes of Cannabis Sativa *Eun Soo Kim*	Korean Traditional Medicine in Treating Patients with Mild Cognitive Impairment: A Multicenter Prospective Observational Case Series *Yu-Jin Choi*	
	Keynote Speech 3 (Room 520)		
	Chair : Eun Soo Kim		
16:40-17:10	* [Keynote Speech 3] (520) The Institute of Cannabis Research (ICR) at Colorado State University-Pueblo: Institute Activities, National Research Trends, and Results of Select ICR Projects *Chad Kinney*		
17:10-18:00	Closing Ceremony & Poster Award (520)		
18:00	End of the Conference		

Room: 520 Time: 10:30-11:00

Keynote Speech #1 / Oct 5th (Sat), 2019

Chair : Ho Sueb Song

Title: Chronic Pain Biotypes Predict Differential Analgesic Response to Verum and Sham Acupuncture

Keywords: Pain, Acupuncture, Fibromyalgia

Name: Prof. Richard Harris
Department: Anesthesiology
Affiliation: University of Michigan
Country: United States

Biography: Dr. Harris is an Associate Professor in the Department of Anesthesiology and Associate Professor in the Department of Internal Medicine Division of Rheumatology at the University of Michigan. Dr. Harris has performed research in the field of fibromyalgia and alternative medicine for the past 14 years. His contributions include clinical trial assessment of acupuncture and other alternative medicines, quantification of clinical and experimental pain, and analysis of functional neuroimaging methods including proton magnetic resonance spectroscopy (1H-MRS), functional magnetic resonance imaging (fMRI), and positron emission tomography (PET). This work has added to the existing body of research that suggests that individuals with fibromyalgia have central neurobiological components to their pathology.

Abstract: Emerging data indicates that not all chronic pain patients with a given diagnosis have the same underlying pathophysiology. This is particularly relevant for the widespread pain condition known as fibromyalgia (FM) wherein existing pharmacologic and non-pharmacologic treatments are suboptimal: only 30-40% of patients have a clinically meaningful reduction in their pain. Varying degrees of pain pathophysiology are also likely relevant for acupuncture as thousands of patients are often needed to determine statistical significance between sham and verum groups in randomized controlled clinical pain trials. I will present data suggesting that quantitative sensory testing and needling sensations obtained at baseline, can be used to identify different biotypes of FM patients that respond differentially to sham and verum acupuncture. More sensitive FM patients respond better to sham acupuncture whereas less sensitive patients respond better to verum. This type of data could improve clinical trial power by selectively identifying the right type of patient at baseline that is likely to respond to the right type of acupuncture treatment. Thus supporting a more personalized approach to the treatment of chronic pain with acupuncture.

Room: 520 Time: 11:00-11:30

Keynote Speech #2 / Oct 5th (Sat), 2019

Chair : Ho Sueb Song

Title: Self-Regulation of Pain through Acupuncture, Peripheral Neuromodulation, Mind-Body Intervention, and Imagery

Keywords: self-regulation, acupuncture, auricular vagus nerve stimulation, mind-body intervention, imagery

Name: Prof. Jian Kong
Department: Psychiatry
Affiliation: Massachusetts General Hospital, Harvard Medical School
Country: United States

Biography: Jian Kong is an Associate Professor at the Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School. He is the director of the Neuroimaging Applications to Pain, Alternative Medicine & Placebo program in the Department of Psychiatry at MGH. His research focuses on pain perception and modulation, placebo and nocebo effects, the brain pathophysiology of disorders such as chronic pain, depression, age-related memory decline, and autism, and how non-pharmacological treatments (e.g., acupuncture, mind-body interventions, auricular vagus nerve stimulation, transcranial direct current stimulation) can modulate brain circuitry in these disorders using brain imaging tools such as MRI/fMRI, PET, and MEG. He has published about 140 peer-reviewed articles and book chapters in the above fields.

Abstract: With thousands of years evolution, the human body has developed self-healing properties to recover from disorders. Theoretically, many alternative medicines may work to activate / enhance this self-regulation process.
In my talk, I will introduce recent studies on the effects and brain mechanisms of acupuncture, mind-body exercise (Tai Chi and Baduanjin), and imagery on both experimental and chronic pain. Findings of these studies suggest that different alternative interventions may share a common network through which to relieve pain.

KEYNOTE SPEECH

Room: 520 Time: 16:40-17:10

Keynote Speech #3 / Oct 6th (Sun). 2019

Chair : Eun Soo Kim

Title: The Institute of Cannabis Research (ICR) at Colorado State University-Pueblo: Institute activities, national research trends, and results of select ICR projects

Keywords: Cannabinoids, Cannabis, Extraction, Learning, Memory, Opioids

Name: Prof. Chad Kinney
Department: Chemistry and Institute of Cannabis Research
Affiliation: Colorado State University-Pueblo
Country: United States

Biography: Dr. Chad A. Kinney is currently a Professor of Chemistry and Director of the Institute of Cannabis Research at Colorado State University-Pueblo. Dr. Kinney joined the faculty at Colorado State University-Pueblo in 2007. He served as the Chemistry Department Chair from 2015-2019. Prior to joining the faculty at Colorado State University-Pueblo he was on the faculty at Eastern Washington University. Dr. Kinney received his Bachelor's Degree in Environmental Chemistry from the University of California San Diego in 1997 and then completed his Ph.D. in Applied Chemistry at the Colorado School of Mines in 2002. Following completion of his graduate work Dr. Kinney was selected for a National Research Council Postdoctoral Fellowship at the U.S. Geological Survey's National Water Quality Laboratory as part of the Methods Research and Development Program. Dr. Kinney's graduate work was in the area of biogeochemistry related to production and consumption of greenhouse gases by bacterial in soils. His postdoctoral research and much of his research since has focused on the development and application of analytical methods for measuring pharmaceuticals and personal care products as environmental contaminants. In the past few years his research activities have added work related to the extraction and isolation of cannabinoids from industrial hemp.

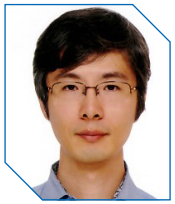
Abstract: The institute of Cannabis Research (ICR) was established in 2016 through a unique partnership between Colorado State University-Pueblo, the State of Colorado, and Pueblo County. The mission of the ICR is to generate new knowledge and understanding of cannabis through innovative research, education, and dissemination of results and information. This presentation will include background information on the ICR and its activities, a discussion of trends in cannabis research in the United States, and results from some research projects supported through the ICR. The first project focuses the development of an efficient extraction method for the recovery of the cannabinoid cannabidiol (CBD) from industrial hemp (< 0.3% Δ9-tetrahydrocannabinol) using pressurized liquid extraction (PLE). This unique PLE method includes a dual extraction process in which the hemp undergoes a pre-extraction with water to promote decarboxylation of cannabidiolic acid (CBD-A) to CBD, without significant loss of neutral cannabinoids, followed by PLE using ethanol to extract the CBD. This PLE method can be employed to efficiently carry out decarboxylation of other acidic cannabinoids to their neutral counterparts. A second project that will be discussed is an interrupted time series analysis was conducted to assess the impact of Colorado's legalization of both medical (2000) and recreational (2014) cannabis over the time period 1999 -- 2018. Both were associated with a reduction of opioid overdose mortality rates. This reduction represents a reversal of the upward trend in opioid-related deaths in Colorado. The final projects that will be discussed aim at showing mechanisms which underlie effects of various cannabinoids on learning and memory in a rodent model. Our published results have shown prominent effects of Cannabidiol on the fundamental mechanisms of learning and memory, and work in progress is showing similar effects of HU-211, a synthetic glutamate receptor inhibitor. This basic medical research involves behavioral, pharmacological, electrophysiological and histological methods and has relevance for understanding appropriate medical applications for cannabinoids to treat brain disorders ranging from Alzheimer's disease to Post Traumatic Stress Disorder.

Room: 520 Time: 12:30-12:50

Session 1: Bigdata and Traditional Medicine *Chair : Sang Hun Lee*

Title: Limitations and Solutions of Traditional Medical Big Data Construction

Keywords: Bigdata, Korean Medicine, Standardization, Traditional medicine



Name: Dr. Sang Hun Lee
Department: Future Medicine Division
Affiliation: Korea Institute of Oriental Medicine
Country: South Korea

Biography: Dr. Sanghun Lee is a principle researcher in future medicine division at Korea Institute of Oriental Medicine. He is also a member of Y-KAST(Young Korean Academy of Science and Technology), and Professor/Department Chair, Dept. of Korean Convergence Medicine. University of Science and Technology. He also works as a project Leader of ISO 19611:2017 Traditional Chinese medicine -- Air extraction cupping device. ISO 20487:2019 Traditional Chinese medicine -- Test method of single-use acupuncture needles for electrical stimulation. in ISO/TC249. His major research area: standardization and scientificization of Traditional medicine device and biomarker. From 2019, he started a project of infrastructure developing project of traditional Korean medicine AI doctor.

Abstract: With the rapid development of AI-related technologies, the importance of high quality big data, which is the core of AI development, is also rapidly increasing.
Traditional medicine, however, has a lot of data generated depending on the five senses. In addition, these data are not collected quantitatively, and the level of standardization is also insufficient.
This presentation shows how traditional medical treatment technology is currently prepared to participate in the AI era, and what needs to be supplemented in the future.

OCT 5TH (SAT), 2019

Room: 520 Time: 12:50-13:10

Session 1: Bigdata and Traditional Medicine *Chair : Sang Hun Lee*

Title: The Methodological Trends of Traditional Herbal Medicine Employing Network Pharmacology Methods

Keywords: Network pharmacology; Traditional herbal medicine; Methodological trend

Name: Prof. Chang-Eop Kim
Department: Physiology
Affiliation: Gachon University, College of Korean Medicine
Country: South Korea

Biography: Prof. Kim is an assistant professor of Department of Physiology at Gachon University. He received his Ph.D. in Physiology from SNU, college of medicine and did postdoctoral research in the department of Computer science at SNU. He has also been trained as a certified physician in biomedical informatics. His research interests have focused on applying data science and machine learning into systems neuroscience and Traditional Korean medicine. More recently, he has concentrated on the network pharmacological study to understand the systems level mechanism of herbal formulae. He is also interested in modeling and analyzing the implicit knowledge of TKM using neural networks.

Abstract:

Objectives: The natural products including traditional herbal medicine (THM) are known to exert their therapeutic effects by acting on multiple targets, so researchers have employed network pharmacology methods to decipher the potential mechanisms of THM. To conduct THM-network pharmacology (THM-NP) studies, researchers have employed different tools and databases for constructing and analyzing herb-compound-target networks. In this study, we attempted to capture the methodological trends in THM-NP research.

Methods: We identified the tools and databases employed to conduct THM-NP studies and visualized their combinatorial patterns. We also constructed co-author and affiliation networks to further understand how the methodologies are employed among researchers.

Results: The results showed that the number of THM-NP studies has dramatically increased in the last decade. The databases and tools used for constructing herbal-compound-target networks have been diversified, and their combinatorial patterns have become more complex. Overall, the Traditional Chinese Medicine Systems Pharmacology Database and Analysis Platform (TCMSP) was the most frequently employed network pharmacology platform in THM-NP studies. Among the processes involved in THM-NP research, the methodology for constructing a compound-target network has shown the greatest change over time.

Conclusion: Our analysis describes comprehensive methodological trends and current ideas in research design for network pharmacology researchers.

Room: 520 Time: 13:10-13:30

Session 1: Bigdata and Traditional Medicine

Chair : Sang Hun Lee

Title: A Clinical Real-World Evidence Sharing Platform Over the Globe

Keywords: Common Data Model, Big Data, Distributed Research Network, Clinical Informatics

Name: Prof. Rae Woong Park
Department: Biomedical Informatics
Affiliation: Ajou University School of Medicine
Country: South Korea

Biography: Prof. Rae Woong Park is the Director and Professor of the Department of Biomedical Informatics at Ajou University School of Medicine, South Korea, and Chairman of board of The Korean Society of Medical Informatics (KOSMI). He graduated Ajou University Medical School (1995) and received his Master of Science at the same university (1999), and he received his Ph.D. (2006) in the Department of Pathology, College of Medicine Chungbuk National University, South Korea. He trained for surgical pathology at the Ajou University Hospital. He had won and involved almost 70 government research grants and have more than 150 peer-reviewed research publications in the medical informatics area.

Abstract: In many countries, researchers and administrators have struggled to apply a standardized data model to harmonize and collect medical data from a variety of heterogeneous sources. However, various barriers exist such as system heterogeneity, various data formats, changes in human protection rules around the world, trust building, contracting and coordination, and research governance policies. Recently, Distributed Research Network (DRN) such as Observational Health Data and Informatics (OHDSI, pronounced "Odyssey") has gained popularity among clinical data partners worldwide.

DRN uses the same data structure, called the Common Data Model (CDM), to run the same analysis program for participating organizations and then combine the results summarized over the network to provide results across the network. OHDSI has transformed more than 1.9 billion patient data from 99 databases in 19 countries into the OMOP (Observational Medical Outcomes Partnership) CDM format.

Korean government supports OHDSI by providing research grants to more than 30 projects on CDM (2018-2022) with total budget of 40M USD. The author oversees FEEDER-NET (Federated E-health Big Data for Evidence Renovation Network), a 3-year research project (2018-2020) granted from government. The total budget of the project is about 10M USD. He is also in charge of new FEEDER-NET+, a new 4-year research project (2019-2022) granted from government. The total budget of this project is about 10M USD. Sixty-one largest Korean hospitals joined the FEEDERNET and FEEDER-NET+. By the end of 2019, more than 25M Korean patient data from EMR are expected to be available in CDM, and the whole Korean population data from EMR and claim data are expected to be available within 3 years.

The author will present how the OHDSI became popular in Korea, and where the Korean clinical society moves forward through the CDM. In his talk, he will also demonstrate how OHDSI will enable researchers to access a network of billions of patients to generate evidence about all aspects of healthcare.

OCT 5TH (SAT), 2019

Room: 520 Time: 14:00-14:20

Session 2: Current Integrative Oncology and Immunotherapy

Chair : Rak-won Choi

Title: A Prospective Cohort Study of TCM integrated Scheme in Treating Non-small Cell Lung Cancer Patients

Keywords: Traditional Chinese Medicine, Comprehensive Treatment, Non-Small Cell Lung Cancer, Prospective Cohort Study

Name: Honggang Zheng MD, Ph.D
Department: Department of Oncology
Affiliation: Guang'anmen Hospital affiliated to China Academy of Chinese Medical Sciences
Country: China

Biography:

EDUCATION

02/2015-02/2016 Visiting Scholars University of Kentucky, USA
08/2007-11/2009 Postdoctoral Guang'anmen Hospital affiliated to China Academy of Chinese Medical Sciences
09/2004-08/2007 M.D. Ph.D. China Academy of Chinese Medical Sciences
09/2001-07/2004 M.M. Shaanxi University of Chinese Medicine, China.

PROFESSIONAL EXPERIENCE

Clinical experience: Lung Cancer Prevention and Treatment with Chinese Medicine, Interventional Therapy for Hepatocellular Carcinoma.

12/2017-Present Deputy Director of Departments, Master's Supervisor, Chief of Doctor, GUANG AN MEN Hospital affiliated to China Academy of Chinese Medical Sciences
01/2012-12/2017 Associate Chief of Doctor, GUANG AN MEN Hospital affiliated to China Academy of Chinese Medical Sciences
09/2012-02/2013 Refresher doctor, Interventional Oncology, Cancer hospital, Chinese academy of medical sciences
08/2011-01/2012 Refresher doctor, Medical Oncology, Cancer hospital, chinese academy of medical sciences
12/2009-12/2011 Attending Doctor, GUANG AN MEN Hospital affiliated to China Academy of Chinese Medical Sciences
07/2004-11/2009 Intern, GUANG AN MEN Hospital affiliated to China Academy of Chinese Medical Sciences.
09/2001-07/2004 Intern, Hospital affiliated to Shaanxi College of Chinese Medicine.
08/2001-09/1999 Resident Doctor, Qingyang People's Hospital of Gansu Province.

Abstract:

Objective: To confirm the exact clinical efficacy of comprehensive treatment of advanced Non-Small Cell Lung Cancer (NSCLC) with Traditional Chinese Medicine (TCM), and to explore the clinical research methods of TCM oncology.

Method: In this study, 542 patients with advanced non-small cell lung cancer (III A-IV) were enrolled in a large sample, multi-center and prospective cohort study, including 260 patients in the Western Medicine cohort, 114 patients in the Chinese Medicine cohort and 168 patients in the Integrated Chinese and Western Medicine cohort. With PFS, OS and quality of life as the main indicators, the efficacy of comprehensive treatment of traditional Chinese medicine and its predominant population were observed.

Result: The median survival time was 280 days in the TCM cohort, 381 days in the western medicine cohort, and 465 days in the integrated traditional Chinese and Western medicine cohort. The difference between any two cohort groups was statistically significant (p<0.0167).It indicated that the median survival time of the Chinese and Western combined cohort was the longest, followed by the western medicine cohort, and the Chinese medicine cohort was the shortest.The median progression-free survival time was 170 days in the TCM cohort, 180 days in the western medicine cohort, and 217 days in the integrated Chinese and Western medicine cohort.There was no statistically significant difference between Chinese medicine cohort and Western medicine cohort.There was statistically significant (p<0.0167) difference between the TCM cohort and the integrated Chinese and Western medicine cohort.Although the difference between the western medicine cohort and the integrated Chinese and Western medicine cohort was not statistically significant, the results showed that the integrated Chinese and Western medicine cohort had a trend of improving the progression-free survival time compared with the western medicine cohort.The 1-year survival rate was 41% in the TCM cohort, 53% in the western medicine cohort, and 61% in the integrated Chinese and western medicine cohort. The 2-year survival rate was 26% in the western medicine cohort and 35% in the integrative medicine cohort.

Conclusion: According to the different stages of treatment, choosing the appropriate Chinese herbal medicine treatment can improve the physical condition, clinical symptoms, quality of life, reduce the adverse reactions of digestive tract caused by radiotherapy and chemotherapy for patients with advanced non-surgical lung cancer. It has the effect trend of enhancing the curative effect of radiotherapy and chemotherapy, and can prolong the survival time. Traditional Chinese medicine alone is not inferior to western medicine in disease progression and overall survival, and there are no obvious adverse reactions. Patients with advanced non-small cell lung cancer should be treated with integrated traditional Chinese and Western medicine when conditions permit. Patients with older age and poor physical condition can choose traditional Chinese medicine alone as appropriate.

Room: 520 Time: 14:20-14:40

Session 2: Current Integrative Oncology and Immunotherapy *Chair : Rak-won Choi*

Title: Pancreatic Cancer Pain Treatment with Acupuncture

Keywords: Pancreatic cancer, pain, acupuncture

Name: Dr. Hao Chen
Department: Integrative Oncology
Affiliation: Fudan University Shanghai Cancer Center
Country: China

Biography:
M.D. Professor, Department of Hepatobiliary and Pancreatic Oncology and Integrative Oncology, Fudan University Shanghai Cancer Center, Shanghai, P.R.China.
Chairman of Chinese Medical Doctor Association Integrative Oncology Expert Committee Focus on the clinical study of TCM in liver cancer and pancreatic cancer, especially for the acupuncture to relieve the cancer relieved pain. Published more than 100 Paper, Received more than 10 fund grants.

OCT 5TH (SAT), 2019

Abstract: Pancreatic cancer is often accompanied by severe abdominal or back pain. It's the first study to evaluate the analgesic effect of electroacupuncture on pancreatic cancer pain. A randomized controlled trial compared electroacupuncture with control acupuncture using the placebo needle.

Methods: Sixty patients with pancreatic cancer pain were randomly assigned to the electroacupuncture group (n ¼ 30) and the placebo control group (n ¼ 30). Patients were treated on Jiaji (Ex-B2) points T8eT12 bilaterally for 30 min once a day for 3 days. Pain intensity was assessed with numerical rated scales (NRS) before the treatment (Baseline), after 3 treatments, and 2 days follow-up.

Results: Baseline characteristics were similar in the two groups. After 3 treatment, pain intensity on NRS decreased compared with Baseline (1.67, 95% confidence interval [CI] 1.46 to 1.87) in the electroacupuncture group; there was little change (0.13, 95% CI 0.08 to 0.35) in control group; the difference between two groups was statistically significant (P < 0.001). Follow-up also found a significant reduction in pain intensity in the electroacupuncture group compared with the control group (P < 0.001).

Conclusions: Electroacupuncture was an effective treatment for relieving pancreatic cancer pain

Room: 520 Time: 14:40-15:00

Session 2: Current Integrative Oncology and Immunotherapy *Chair : Rak-won Choi*

Title: Cordycepin Inhibits Human Ovarian Cancer by Inducing Autophagy and Apoptosis through Dickkopf-Related Protein 1/b-Catenin Signaling

Keywords: apoptosis, Dickkopf-related protein 1, β-catenin, autophagy, cordycepin

Name: Prof. Hwaseung Yoo
Department: East West Cancer Center
Affiliation: Daejeon University Seoul Korean Medicine Hospital
Country: South Korea

Biography: Prof. Hwaseung, Yoo (MD (DKM), Ph.D)
Head of Seoul Korean Medical Hospital of Daejeon University
Director of East West Cancer Center·Integrative Immunotherapy Center
Vice President of Korean Society of Integrative Oncology

Dr. Hwaseung Yoo received his MD (DKM)., M.Sc. and Ph.D from Daejeon University. He has completed oncology residency at the East West Cancer Center (EWCC) and research fellowship at the Cancer Clinic of Guang-An-Men Hospital, Beijing, China. Dr. Yoo is a professor of College of Korean Medicine at Daejeon University and a faculty staff member of EWCC at Daejeon University's Dunsan Korean Medical Hospital where he specializes in traditional cancer therapies. He is the co- developer of Wheel Balance Cancer Therapy (WBCT), EWCC's standard cancer

regimen which incorporates interventions of Traditional Korean Medicine (TKM) to conventional cancer treatment. His case series submissions have been selected for US National Cancer Institute (NCI)'s Best Case Series Program, the results were published on Integrative Cancer Therapies in 2009 and 2010. An overview of WBCT program and the retrospective survival outcomes of advanced non-small lung cancer patients were introduced on the same journal in 2010 and 2016. Primary focuses of his researches are investigating the biochemical mechanisms and clinical effects of herbal extracts and incorporating different treatment methods using the herbs, acupuncture, pharmacopuncture,etc. His notable publications are Integrative Oncology (E-public, 2009), Pharmacopuncturology (Elsevier, 2011), Integrative Oncology in Korean Traditional Medicine (Gunja, 2013), Integrative Oncology 2nd edition (E-public, 2017) and over 400 research papers including 80 international journals. He has served as a visiting associate professor at Integrative Medical Program in the University of Texas MD Anderson Cancer Center for one year in 2012. Now he is serving as PIs for the development of an anti lung cancer herbal medication, acupuncture for breast cancer patient, and platform establishment for Korean traditional oncology from Ministry of Health & Welfare.

He has been an executive board member of the Society of Integrative Oncology (SIO) since 2004. World Health Organization (WHO) Regional Office for the Western Pacific nominated him as a Traditional Korean Medicine oncology specialist in 2005. He was also featured on the 10th anniversary edition of 2008-2009 Marquis Who's Who in Science and Engineering. He has served on the editorial boards members of Integrative Cancer Therapies, Korean Journal of Oriental Medicine, Korean Journal of Oriental Internal Medicine, Journal of Korean Academy of Traditional Oncology, Journal of Korean Phamacopuncture Institute, etc. Now he serves a Head of Seoul Korean Medical Hospital of Daejeon University, Director of East West Cancer Center·Integrative Immunotherapy Center and Vice President of Korean Society of Integrative Oncology (KSIO) and Korean Association of Traditional Oncology (KATO).

Abstract:

Background and Aim: Cordycepin, the major active component from Cordyceps militaris, has been reported to significantly inhibit some types of cancer; however, its effects on ovarian cancer are still not well understood. In this study, we treated human ovarian cancer cells with different doses of cordycepin and found that it dose-dependently reduced ovarian cancer cell viability, based on Cell counting kit-8 reagent.

Method and Result: Immunoblotting showed that cordycepin increased Dickkopf-related protein 1 (Dkk1) levels and inhibited β-catenin signaling. Atg7 knockdown in ovarian cancer cells significantly inhibited cordycepin-induced apoptosis, whereas β-catenin overexpression abolished the effects of cordycepin on cell death and proliferation. Furthermore, we found that Dkk1 overexpression by transfection downregulated the expression of c-Myc and cyclin D1. siRNA-mediated Dkk1 silencing downregulated the expression of Atg8, beclin, and LC3 and promoted β-catenin translocation from the cytoplasm into the nucleus.

Conclusion: These results suggest that cordycepin inhibits ovarian cancer cell growth, possibly through coordinated autophagy and Dkk1/β-catenin signaling. Taken together, our findings provide new insights into the treatment of ovarian cancer using cordycepin.

OCT 5TH (SAT), 2019

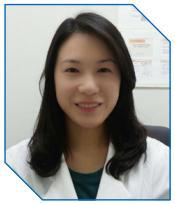
Room: 520 Time: 15:00-15:20

Session 2: Current Integrative Oncology and Immunotherapy

Chair : Rak-won Choi

Title: Electric Moxibustion for Upper-Limb Lymphedema in Breast Cancer Patients

Keywords: lymphedema, moxibustion, breast cancer, clinical trial



Name: Dr. Kyungsun Han
Department: Clinical Medicine Division
Affiliation: Korea Institute of Oriental Medicine
Country: South Korea

Biography: Kyungsun Han is currently a senior researcher at Korea Institute of Oriental Medicine (KIOM). She is a K.M.D, Ph.D of Korean Medicine and a specialist of Korean Rehabilitation Medicine. The major research in KIOM focuses on establishing the evidence for clinical practice-based Korean medicine treatments. Her team is recently conducting several clinical trials to evaluate therapeutic effect of integrative treatment on cancer-related diseases and metabolic syndrome. One of her research interests is to understand how integrative treatment or Korean medicine affect the gut microbial community and lead to predisposition towards various diseases.

Abstract:

Objectives: This study is a preliminary study to investigate the possibility of clinical study of electric moxibustion in breast cancer patients with upper limb lymphedema. It has been reported that about 20% of patients suffer from chronic lymphedema after breast cancer surgery. In general, compression therapy, physical therapy, mild exercise, and massage are suggested to improve the symptoms. However, if the symptom persists, it can cause stiffness of the shoulder joints and may interfere with the quality of life. Although there has been a series of studies showing that acupuncture may be an effective treatment, invasive stimulations are generally avoided with patients with lymphedema. Therefore, other possible treatment for the chronic lymphedema is needed.

Methods: To investigate the feasibility of electric moxibustion in the treatment of upper limb lymphedema, subjects who completed primary cancer treatment at least 6 months ago and has more than 10 mm differences of arm circumference between both upper limbs were included in this study. All subjects were assigned to the treatment group. Subjects were treated with 16 times (30 minutes / times) of electric moxibustion for 8 weeks and was evaluated at baseline, week 5, 9 and 13. For the outcome measures, circumferences of upper limbs, edema index, shoulder range of motions (ROM) and quality of life were assessed before and after the study.

Results: Eight female participants who completed the study were included in the analyses. The mean age was 50.9 (ranging from 44 to 62) and the mean body mass index was 24.5mg/k2 (ranging from 19.8 to 31.4). Lymphedema patients in dominant side of the upper limb were 3 (37.5%). After 8 weeks of electric moxibustion treatment, the difference in the circumference between both arms decreased significantly. The mean reduction of circumference difference was 8.38mm (95% CI, 0.98-15.77; p =.032). The mean difference in flexion ROM between both arms was 13.58 degrees (95% CI, 4.30-22.85; p =.011). There were 6 adverse events and most of them were irrelevant to the treatment (upper respiratory infection, back pain, etc.). Only one participant had mild burn on the acupuncture point.

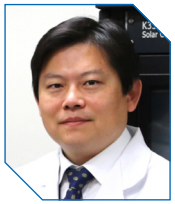
Conclusion: Here we demonstrate for the first time that electric moxibustion treatment is a feasible treatment for upper-limb lymphedema after breast cancer surgery. We found that electric moxibustion may reduce difference in upper limb circumference and improve shoulder ROM. Future comparative clinical trial is needed to confirm the clinical effectiveness of the treatment.

Room: 520 Time: 15:30-15:50

Session 3: Clinical Research I *Chair : Myeong Soo Lee*

Title: Enhanced Therapeutic Treatment of Colorectal Cancer Using Surface-Modified Nanoporous Acupuncture

Keywords: Acupuncture, Cancer, Nano, β-catenin, HT7



Name: Prof. Su Il In
Department: Energy Science & Engineering
Affiliation: DGIST (Daegu Gyeongbuk Institute of Science & Tech)
Country: South Korea

Biography: Prof. SU-IL IN has been working at DGIST (Daegu Gyeongbuk Institute of Science & Technology) since 2012. He served as Dean of International and External Affairs 2016 ~ 2017. He received his Ph.D. in Chemistry from University of Cambridge in 2008. Subsequently he was a postdoctoral researcher at Technical University of Denmark by 2010. Then he joined the Pennsylvania State University as a postdoctoral researcher in the Department of Chemistry before joining DGIST. (https://insuil.dgist.ac.kr/)

Title: Enhanced Therapeutic Treatment of Colorectal Cancer Using Surface-Modified Nanoporous Acupuncture

Keywords: Acupuncture, Cancer, Nano, β-catenin, HT7

Abstract:

Acupuncture originated within the auspices of Oriental medicine, and today is used as an alternative method for treating various diseases and symptoms. The physiological mechanisms of acupuncture appear to involve the release of endogenous opiates and neurotransmitters, with the signals mediating through electrical stimulation of the central nervous system (CNS). Earlier we reported a nanoporous stainless steel acupuncture needle with enhanced therapeutic properties, evaluated by electrophysiological and behavioral responses in Sprague-Dawley (SD) rats. Herein, we investigate molecular changes in colorectal cancer (CRC) rats by acupuncture treatment using the nanoporous needles. Treatment at acupoint HT7 is found most effective at reducing average tumor size, β-catenin expression levels, and the number of aberrant crypt foci in the colon endothelium. Surface modification of acupuncture needles further enhances the therapeutic effects of acupuncture treatment in CRC rats.

OCT 5TH (SAT), 2019

Room: 520 Time: 15:50-16:10

Session 3: Clinical Research I *Chair : Myeong Soo Lee*

Title: Complex Approach to the Chronic Migraine Treatment: Connection Between Western and Oriental Medicine

Keywords: Chronic migraine, Reflexotherapy, Acupuncture, Su Jok, Electroacupuncture,Rehabilitation

Name: Dr. Anna Kamavosyan
Department: Integrative Medicine
Affiliation: Federal State Autonomous Educational Institution o
Country: Russia

Biography: My name is Anna Kamavosyan. I graduated from medical pediatric faculty of Russian National Research Medical University (Russia, Moscow) in 2016. I graduated from the residency in manual therapy and reflexology in clinical neurology, reflexology and manual therapy department of Russian Medical Academy of Continuous Professional Education (Russia, Moscow) in 2019.

In my educational path Oriental Medicine has always been my greatest interest. My current specialization is manual therapy and I have been in the industry for 2 years therefore learning the traditional Chuna manual therapy with a great passion. Especially I would like to find out a different point of view in a new dimension for treatment of spinal and other disorders which would greatly expand and excel my knowledge in this matter.

Currently, my educational career takes place in a state hospital in an adult neurological department, where we successfully apply the treatment methods of manual therapy and acupuncture. Pulse diagnosis is my special interest and passion, which has been proven to be the most original method highly established in Korea. I wish to go deep into pulse diagnosis and acupuncture in practice treating a wide variety of diseases and adopt the experience of treating patients in Ophthalmology, Neuropsychiatry, Pediatrics, Obstetrics and Gynecology, Otorhinolaryngology. This experience would be a vital step for my research and in my practice as a doctor.

Abstract:

Authors: Zilov V.G., Safonov M.I., L.V. Smekalkin, M.V. Naprienko, A.K. Kamavosyan

Objective: To evaluate the effect of different reflexology techniques on main clinical indices of patients with chronic migraine, the number of analgesics used and dynamics of chronic migraine comorbid disorders.

Material and methods: The study included 84 patients (60 women (71.5%) and 24 men (28.5%)), aged from 18 to 63 years, with a diagnosis of chronic migraine. Patients were randomized in 4 groups — Su Jok (n=22), acupuncture (n=22), electroacupuncture (n=20), control (n=20). Topiramate was administered in all groups in dose of 100 mg daily. Patients were evaluated before treatment, after 4 and 16 weeks from randomization.

Results: There was a marked regression in frequency of headache in reflexological groups in comparison with the control. The number of days with headache was 19±1.12 at baseline and 6.57±1.3 days after treatment in the Su Jok group; 21.6±1.688 and 7±1.786 days in the acupuncture group; 20.25±1.97 and 5.75±0.633 days in the electroacupuncture group. Each of the methods had an impact on various clinical aspects of chronic migraine and comorbid disorders: Su Jok was most effective in treatment of autonomic disorders, the use of acupuncture resulted

in the significant reduction of headache intensity and regression of anxiety disorders. The electroacupuncture group showed a significant increase in pain threshold and the least number of days with headache per month.

Conclusion: Reflexotherapy is a method of choice in the complex treatment of patients with chronic migraine. Taking into account complex diagnosis, the individually oriented approach in prescribing of different reflexology techniques for successful treatment and subsequent rehabilitation of patients with chronic migraine is required

Room: 520 Time: 16:10-16:30

Session 3: Clinical Research I

Chair : Myeong Soo Lee

Title: Results of Comparison of Indicators of Clinical-Neurological, MRI, Auricular and Su-joke Diagnostics in Patients with Vascular Diseases of the Brain

Keywords: stroke, chronic cerebrovascular disorder, auricular, su-joke diagnostics

Name: Prof. Olga Kovalenko
Department: Family medicine and Primary Care
Affiliation: National Medical Academy of Postgraduate Education
Country: Ukraine

Biography: Kovalenko Olga is the president of the Ukrainian public organization "Ukrainian Association of Reflexotherapy and Medical Acupuncture" (UARMA), Doctor of Medical Sciences, Doctor of Philosophy, Professor, neurologist and acupuncturist.

She works at the National Medical Academy of Postgraduate Education named after PL Shupyk as a professor at the Department of Family Medicine and Ambulatory and Clinical Care, where he teaches neurology, rehabilitation and reflexology. Along with pedagogical work, he conducts scientific research in the field of diagnostics, treatment, including, using acupuncture, different diseases of the nervous system and other human diseases. Has over 400 publications of scientific and educational-methodical nature.

The experience of a medical doctor is 31 years, including the experience of acupuncture and TCM - since 1988. Professor Olga Kovalenko is the main organizer of scientific and practical conferences on reflexology, acupuncture and traditional medicine in Ukraine, introduces the use of oriental methods for various diseases, in particular, in family medicine, neurology, and rehabilitation.

He takes an active part in the work of international scientific-practical conferences and seminars, where he has improved his qualifications and delivered reports:

2009 - International Conference and Exposition on Traditional Medicine 2009. - China, Guangzhou. 2013 - The 8th Wold Conference of Acupuncture. WFAS 2013 - 2-4 November. - Sydney, Australia.

2014 - World Acupuncture & Integrative Medicine Conference. - WFAS 2014, Houston, Texas, USA.

2015 - The 18th Annual Inernational Conference on Acupuncture and Traditional Chinese Medicine. WFAS 2015. - Toronto, Canada, 24-27 September.

2016 - International Conference of WFAS Tokyo/Tsukuba. 4-6 Nov, 2016. (also a moderator of the section at the conference).

ICMART: XVIII Congress ICMART, June 2016. - Sofia, Bulgaria.

ICMART-iSAMS 2018: World Congress of Medical Acupuncture. Munich, 7-9 sept 2018.

Abstract:

Goal: Compare and analyze the indicators of clinical neurological examination, MRI, auricular, su-jok diagnosis in patients after a stroke and with chronic cerebrovascular disorder to further substantiate the use of complementary methods in clinical practice, primarily as an express method.

Objectives and methods: Group I - 56 patients after a stroke in the early residual period, age 54±7.1, including 23 men and 31 women. 48 (85.7%) patients had a stroke in the carotid vascular basin, 8 (14.3%) - in vertebral-basilar. Group II - 30 patients with signs of chronic cerebrovascular disorders. All patients were clinically-neurological, MRI-examination, assessment of the condition of the earlobe and the first fingers of the hands and feet (examination of the skin and subcutaneous soft tissues). Indicators were compared with the data of 30 patients without vascular pathology of the brain of the same age.

Results: Clinical and neurological examination, which included the collection of complaints, anamnesis, the evaluation of objective indicators and MRI brain examination, verified the presence of a stroke and / or the presence of chronic cerebrovascular disorders. All patients (100%) of the first two groups, regardless of gender, age, localization of the stroke, had trophic changes of varying degrees of severity in the area of the muzzle and the ankle ear of the auricle: hypotrophy of the muzzle (on both sides, more pronounced homolateral foci of a stroke), the presence of Frank's furrow, mesh in the form of shallow furrows, escrigation in the area of the anti-knuckle. Compliance of the changes was observed depending on the localization of the stroke: shallow furrows with vertebro-basilar strokes in the upper part of the ear lobe, in the mid-lower part of the carotid. In 62%, there was a sharp change in the color of the skin of the auricle at the level of the posterior auricle and the edges of the earlobe (from red to ischemic pale), 83% had hypotrophy of the skin in the posterior auricle, indicating vertebrogenic effects on cerebral circulation. There were also trophic changes in the distal phalanxes of the fingers and palms of the hands, changes in sensitivity in the gonotal center of the sensation (compared by measuring the fingers in mm). Interestingly, the presence of a stroke and chronic stroke-stroke cerebral circulation disorders was also accompanied by trophic and ischemic changes in the anus, but significantly differed in severity of manifestations, indicating the presence of prostate instigators and the possibility of predicting them. In patients without signs of cerebrovascular accident, the indicated trophic changes were absent.

Conclusions: For the verification of vascular pathology of the brain and prediction of stroke, as well as the evaluation of the effectiveness of rehabilitation, it is advisable to use as a rapid-test auricular and su-joke diagnosis.

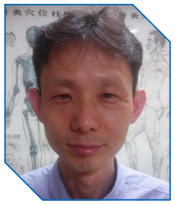
Room: 520 Time: 16:30-16:50

Session 3: Clinical Research I

Chair : Myeong Soo Lee

Title: A Synergistic Effect of Combination of Acupuncture and Herb on the Methamphetamine's Reinforcement

Keywords: Acupuncture, SI5, Ja-Geum-Jung, Korean Medicine, Methamphetamine, Drug addiction



Name: Prof. Bong Hyo Lee
Department: Acupuncture, Moxibustion, and Acupoint
Affiliation: Daegu Haany University
Country: South Korea

Biography:

CAREER

Paid-doctor, Na Ch'eon Korean Medicine Clinic established by Na Ch'eon social welfare foundation, OCT 1999 – DEC 2000

Director and doctor, Geon Ch'eon Korean Medicine Clinic, DEC 2000 – DEC 2003

Teaching and research assistant, College of Korean Medicine, Daegu Haany University, MAR 2004 – FEB 2007

Full-time instructor, College of Korean Medicine, Daegu Haany University, MAR 2007 – APR 2009

Assistant Professor, College of Korean Medicine, Daegu Haany University, MAY 2009 – APR 2013

Associate Professor, College of Korean Medicine, Daegu Haany University, MAY 2013 – up to now

Exchange Visitor (Visiting Scholar), Department of Psychiatry, Uniformed Services University of the Health Sciences, Department of Defense, USA, Aug 2015 – Jul 2016.

Degree of Bachelor in Korean Medicine, Daegu Haany University, Feb 1999

Degree of Master in Korean Medicine (concentration: Acupuncture and Moxibustion), Daegu Haany University, Feb 2002

Degree of Doctor in Korean Medicine (concentration: Meridian and Acupoint), Dongguk University, Aug 2006

Abstract:

Objective: Methamphetamine (METH) is one of the representative drugs abused world widely and the reinforcing effect is exerted by the increase of dopamine (DA) release in the mesolimbic system. Acupuncture has been used for thousands of years to treat diverse disease including neuropsychiatric problems and been shown to be effective in the suppression of intravenous METH self-administration. Ja-Geum-Jung, a kind of herbal formula of Korean medicine, was reported to be effective for the atopic dermatitis. The present investigated if the combination of acupuncture and Ja-Geum-Jung could be better than alone treatment.

Materials and methods: Male Sprague-Dawley rats were given methamphetamine (1 mg/kg) intraperitoneally and the locomotor activity and ultrasound vocalization (USV) expression were measured. Electrophysiological methods were used to investigate a possible neuronal mechanism in the brain.

Results: Ja-Geum-Jung attenuated METH induced increases in the locomotor activity and USV. Acupuncture enhanced these effects showing a synergistic effect in the combination with Ja-Geum-Jung. Also, amygdala was shown to be involved in these effects. Conclusion: Combination of acupuncture and herbal formula has been demonstrated to make better effects than alone treatment on the METH, in parallel with the experience of thousands of years in the Eastern Asia.

Room: 517 Time: 12:30-12:50

Session 4: Laser Acupuncture

Chair : Insoo Jang

Title: The Clinical Application of Laser in Korean Medicine: Laser acupuncture, moxibustion and others

Keywords: Laser acupuncture, low level laser, laser moxibustion, photobiomodulation

Name: Prof. Insoo Jang MD (Korean Medicine), PhD
Department: College of Korean Medicine
Affiliation: Woosuk University
Country: South Korea

Biography: Insoo Jang is the dean of College of Korean Medicine, at Woosuk University, Jeonbuk, South Korea and has been working at the Department of Internal Medicine, Woosuk University Hospital of Korean Medicine since 2001. He has been the chair of Woosuk University Hospital of Korean Medicine since 2016.

He graduated from premedical course and college of Korean Medicine at Woosuk University, and his PhD from Kyunghee University in 2002, was entitled: Study on the central neural pathway of the heart, EH6 and He7 with neural tracer in rats.

He is a specialist in internal medicine registered in the Ministry of Health and Welfare, Korea, and worked as a military doctor, Korean Army Special Force.

He has been using photobiomodulation in his practice since 2000, and he has received the North American Association for Laser Therapy (NAALT) Travel Award at the 2014 NAALT annual conference.

He is on the editorial board of 'Photomedicine and laser surgery' (Mary Ann Liebert, New York) and two scientific journals and, also working as a reviewer for the peer-reviewed journals (indexed by PubMed): Medicine, Acupuncture in Medicine, Complementary Therapies in Medicine, Journal of Alternative and Complementary Medicine, Evidence Based Complementary and Alternative Medicine, BMC Complementary and Alternative Medicine, and others. He is the Chair of Korean Medicine Association for Laser Therapy and, his research keywords are as they are below: Photobiomodulation, laser acupuncture, LLLT, the methodology of clinical research, and neurology.

Abstract: Laser acupuncture have a long history since it was firstly performed by Plog in 1973.

The principle of laser acupuncture is a combination of biostimulation of photobiomodulation (Low level laser therapy (LLLT)), and acupuncture specific effects

As shown in many reviews, one of the most common indications is pain control and recovery of function in musculo-skeletal disorders: low back pain, shoulder pain, ankle sprain, tendon lesion, osteoarthritis, plantar fasciitis, postoperative recovery, trigeminal neuralgia and etc.

In addition, many indications in the pediatric area are being reported: nocturia, asthma, bronchitis, rhinitis, sinusitis, postoperative nausea and vomiting, various pediatric pain disorders, pediatric headaches, and etc. It is also used in neyurogical disease such as stroke sequelae, brain injury, headache, migraine. Studies have been reported in dermatological indication, including acne, allergic diseases, burns and skin ulcer. Advantages of laser acupuncture are that there is no pain in low level laser such as indium laser, and there are advantages such as ease of procedure and hygiene safety as well.

In the future, with the development of various devices, the scope of the laser acupuncture and moxibustion is expected to expand further.

Room: 517 Time: 12:50-13:10

Session 4: Laser Acupuncture *Chair : Insoo Jang*

Title: Light Therapy and Mechanism of Laser Application

Keywords: Medical Laser, Laser therapy, Laser acupuncture, Photobiomodulation

Name: Changsop Yang K.M.D. Ph.D.
Department: Senior Researcher, Clinical Medicine Division
Affiliation: Korea Institute of Oriental Medicine
Country: South Korea

Biography: Changsop Yang is a researcher at Korea Institute of Oriental Medicine since 2012. His position is the team leader of clinical research coordinating team, clinical medicine division. He got PhD in Korean medicine, Woosuk university at 2010. He is a specialist in Korean internal medicine. His major interest is focused on clinical effectiveness of korean medicine technic.

Abstract: Modern physics defines light as an electromagnetic radiation. As optical science reveals properties of the light, its medical applications are increasing. In the history of korean medicine, heliotherapy was used to promote vital energy. As written at Dongeuibogam, a concave mirror was used to get fire from solar light for moxibustion. Laser is a kind of light that is amplified by stimulated emission of radiation. It was suggested by Albert Einstien in 1920s. The first ruby laser was invented in 1960 by T. maiman. Monochromatic, coherent and collimated light is unique properties of laser radiation. Medical lasers can be classified as surgical laser and therapeutic laser. Surgical lasers has photo-thermal, photo-ablative and photo-chemical effects. Therapeutic lasers are focused on maximizing the photobiomodulation effects. It is a non-thermal process involving tissue chromophores eliciting ATP synthesis and modulating signal pathways. Photobiomudulation include pain relieving, anti-inflammatory, anti-edematous, wound healing and scar preventing effects. Korean medicine doctors are using artificial light source for acupuncture and moxibustion treatments. Several lasers are used to stimulate acupoints. Laser acupuncture is useful in the treatment of tendinitis, osteoarthritis, muscle pain. Transcranial laser therapy has been studied for brain injuries such as traumatic brain injury and stroke.

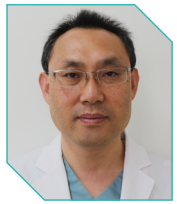
OCT 5TH (SAT), 2019

Room: 517 Time: 13:10-13:30

Session 4: Laser Acupuncture *Chair : Insoo Jang*

Title: What is the High Level Laser?

Keywords: High temperature heat energy; Cauterization; Searin iron; High level laser, Permeability, Selectivity



Name: Prof. Hyungsik Seo
Department: Surgery of Korean Medicine
Affiliation: Pusan National University, School of Korean Medicine
Country: South Korea

Biography: A full professor, Pusan National University, School of Korean Medicine.
A vice-president, The Society of Korean Medicine Ophthalmology, Otolaryngology & Dermatology

Abstract: Korean medical therapy, which use high temperature heat energy, is a cauterization(烙法). Cauterization(烙法) is application of a searing iron to destroy diseased tissue. High level lasers are medical devices that use high temperature heat energy. High level laser are medical devices in which cauterization(烙法) is modified according to the change of the times. Various laser medical devices are being made to overcome the limitations of the cauterization(烙法) such as permeability and selectivity.

Room: 517 Time: 13:30-13:50

Session 4: Laser Acupuncture *Chair : Insoo Jang*

Title: The History of CO_2 Laser Acupuncture and Moxibustion

Keywords: TBA

Name: Prof. Seungho Sun
Department: College of Korean Medicine
Affiliation: Sangji University
Country: South Korea

Biography: TBA

Abstract: TBA

Room: 517 Time: 14:00-14:20

Session 5: Neurobiological Actions of Acupuncture Treatment in Pain Control

Chair : Hi-Joon Park

Title: Mechanisms of Acupuncture Analgesia in Mice Pain Models

Keywords: Acupuncture; Inflammatory pain; Fibromyalgia pain, TRPV1; Brain

Name: Prof. Yi-Wen Lin
Department: College of Chinese Medicine
Affiliation: Graduate Institute of Acupuncture Science
Country: Taiwan

Biography: I am a Professor at the China Medical University. My primary research interest is Acupuncture science. My research topic is concerning about the mechanisms of acupuncture analgesia. We want to investigate the mechanisms underlying antinociceptive effect of EA at Zusanli (ST36) acupoint. We have several methods to identify novel mechanisms in acupuncture therapy such as animal behaviors, immunohistochemistry staining, western blotting, and electrophysiology. We suggest that several pain (inflammatory, fibromyalgia, neuropathic) models-induced mechanical and thermal hyperalgesia was attenuated by EA. TRPV1 and associated signaling pathways was increased in inflammatory and fibromyalgia pain and further attenuated by EA. TRPV1 and associated signaling pathways can be prevented in TRPV1 knockout mice, suggesting that TRPV1 knockout mice are resistant to inflammatory pain. We hope these findings could be applied in clinical study for better therapy.

Abstract:

Objective: Chronic pain has a definitive lack of objective parameters in the measurement and treatment efficacy of diseases such as inflammatory and fibromyalgia (FM) pain. This disease has indicated a refractory tendency to conventional treatment ventures, largely resultant from a lack of etiological and pathogenic understanding of the disease development. Emerging evidence indicates that the central nervous system (CNS) plays a critical role in the amplification of pain signals. It remains unclear whether or not electroacupuncture (EA) can attenuate the chronic pain associated with inflammatory and FM pain

Methods: We examined the contribution of the transient receptor potential vanalloid 1 (TRPV1) channel to inflammatory and fibromyalgia-like pain in inflammatory and intermittent cold-stress (ICS) model, in the prefrontal cortex, somatosensory cortex, hippocampus and thalamus areas of the brain. The potential therapeutic benefits of electroacupuncture (EA) was analysed in order to identify the analgesic effects and mechanism.

Results: We suggest that TRPV1 upregulation is central to the inflammatory and FM pain induced hyperalgesia and the treatment of EA showed a decrease in these pain induced nociceptive sensitization, suggesting TRPV1 and related nociceptive conduit upregulation and overexpression can be attenuated by EA. The results indicate that EA treatment successfully attenuated both mechanical and thermal hyperalgesia. A majority of proteins associated with the nociceptive signalling cascade indicated overexpression in inflammatory and FM pain, which was rescued through the use of EA. The use of TRPV1 knockout mice allowed for a successful blockade of TRPV1 expression, and further served to elucidate the role of the TRPV1 receptor in the development and expression of inflammatory and FM-like pain. This evidence strongly suggests that the TRPV1 signalling pathway and related components may represent promising therapeutic targets for FM treatment.

Conclusion: Furthermore, the treatment of EA showed a decrease in the inflammatory and FM induced nociceptive sensitization, suggesting TRPV1 upregulation and overexpression can be attenuated by EA at bilateral ST36, and that EA can provide analgesic benefits to patients suffering from inflammatory and FM pain.

OCT 5TH (SAT), 2019

Room: 517 Time: 14:20-14:40

Session 5: Neurobiological Actions of Acupuncture Treatment in Pain Control

Chair : Hi-Joon Park

Title: Acupuncture Point: One form of neurogenic inflammation in skin

Keywords: acupuncture point, neurogenic, visceral pain

Name: Prof. Hee Young Kim
Department: Physiology
Affiliation:: Daegu Haany University
Country: South Korea

Biography: Positions and Employment
1998-2000Research Associate, Department of Surgery, Veterinary Medicine, Seoul National University, Seoul, Korea
2000-2005 Research Associate, Department of East-West Medicine, Kyung-Hee University, Suwon, Korea
2006-2010 Postdoctoral Research Associate, Department of Neuroscience and Cell Biology, University of Texas Medical Branch, Galveston, Texas
2010-2011 Assistant Professor, Department of Neuroscience and Cell Biology, University of Texas Medical Branch, Galveston, Texas
2011- Adjunctive Professor, Department of Neuroscience and Cell Biology, University of Texas Medical Branch, Galveston, Texas
2011-2017 Assistant Professor, Department of Physiology, College of Korean Medicine, Daegu Haany University, Daegu, Korea
2017.09- Associate Professor, Department of Physiology, College of Korean Medicine, Daegu Haany University, Daegu, Korea
Other Experience and Professional Memberships
2000- Member, Society for Neuroscience

Abstract: Visceral pain produces 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 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.
This research was supported by the National Research Foundation of Korea (NRF) grant funded by the Korea government (MSIT)(No.2018R1A5A2025272 and 2018R1D1A1B07046196), KBRI basic research program through Korea Brain Research Institute funded by Ministry of Science and ICT (18-BR-03) and Korea Institute of Oriental Medicine (KIOM) K18181.

Room: 517 Time: 14:40-15:00

Session 5: Neurobiological Actions of Acupuncture Treatment in Pain Control

Chair : Hi-Joon Park

Title: Electroacupuncture in Essential Hypertension: Over-Excitation of Sympathetic Tone

Keywords: manual acupuncture, moxibustion, peripheral and central actions

Name: Stephanie C Tjen-A-Looi
Department: Susan Samueli Integrative Health Institute, College of Health Sciences
Affiliation: University of California, Irvine
Country: United States

Biography: I received my Bachelor of Science in Nutrition Science from University of California, Davis followed by a Master in Veterinary Science and Doctor in Philosophy in Animal Health and Biomedical Science from the veterinary medical school in University of Wisconsin in Madison. I have investigated the mechanisms underlying the cardiovascular responses to somatosensory and visceral afferent activation since 1989. My research interests include neural regulation of the cardiovascular reflex responses, autonomic nervous system regulation, hypertension and somatosensory responses. The peripheral nervous system, local axon reflexes and the central processing of visceral and somatosensory (acupuncture) input modulate sympathoexcitatory and parasympathoinhibitory cardiovascular reflex responses and cardiovascular conditions like hypertension. The central nervous system portion of my work includes the cardiovascular brain regions that play roles in the actions of acupuncture. These actions involve several specific neurotransmitters that contribute to the prolonged effect of EA. In addition to investigating the neural pathways and mechanisms involved with stimulation of somatosensory nerves or acupoints, my research includes age and gender related differential acupuncture outcomes.

Abstract: Essential hypertension a multifactorial pathophysiological condition involves many systems including the sympathetic nervous system. Increased sympathetic activity contributes to the elevation of blood pressure during sympathoexcitatory cardiovascular reflex responses as well as in hypertension. We have shown that electroacupuncture (EA) reduces sympathoexcitation and both reflex elevations of blood pressure and hypertension in animals and humans. In addition, EA reduces sympathoexcitatory blood pressure responses in hypertensive subjects. Elevated blood pressure also is reduced with manual acupuncture and moxibustion. Hypothalamic to medullary cardiovascular regions in the brain process the actions of EA, manual acupuncture and moxibustion involving specific mechanisms during sympathoexcitation. Recent investigations focused on the peripheral mechanisms at the acupoint site during EA, manual acupuncture and moxibustion. We hypothesized that the transient receptor potential vanilloid (TRPV1) peripheral local mechanism at the acupoint site is involved in the blood pressure lowering effect. In anesthetized rats using neurophysiology, siRNA, pharmacology, immunohistochemistry and hemodynamic responses, our data show that peripheral local TRPV1 participates during the blood pressure lowering effect with manual acupuncture and heat sensitive moxibustion but not EA. Mechano sensitive TRPV1 contributes to manual acupuncture activating peripheral somatosensory nerves. In contrast, EA-induced increase of somatosensory activity is not affected by blockade of TRPV1 at the site of acupoint. Similarly, TRPV1 knockdown in dorsal root ganglia (DRG) reduced activation of the peripheral DRG neurons during manual acupuncture but not EA. Sympathoexcitatory increase in blood pressure is reduced by acupoint specific moxibustion through local heat sensitive TRPV1 but not EA. In aggregate, EA, manual acupuncture and moxibustion applied at specific acupoints employ different peripheral local mechanisms to reduce elevated blood pressure and over-excitation of sympathetic activity.

OCT 5TH (SAT), 2019

Room: 517 Time: 15:00-15:20

Session 5: Neurobiological Actions of Acupuncture Treatment in Pain Control

Chair : Hi-Joon Park

Title: Bee Venom Stimulation of a Lung Meridian Acupoint Reduces Inflammation in a Mouse Model of Carrageenan-Induced Pleurisy

Keywords: Bee venom, Acupuncture, Pleurisy, Anti-inflammation

Name: Hoon-Seong Choi
Department: Research Animal Resource Center
Affiliation: Korea Institute of Science and Technology (KIST)
Country: South Korea

Biography: 2018.08 ~ 2018.10. Postdoctoral fellow, Department of Veterinary Physiology, College of Veterinary Medicine, Seoul National University, Seoul, Korea
2010.03 ~ 2018.02. Ph.D., Department of Veterinary Physiology, College of Veterinary Medicine, Seoul National University, Seoul, Korea
2010.03 ~ 2010.02. B.S., College of Veterinary Medicine, Seoul National University, Seoul, Korea

Abstract: Respiratory inflammation is a frequent and fatal pathologic state encountered in veterinary medicine. Although diluted bee venom (dBV) has potent anti-inflammatory effects, the clinical use of dBV is limited to several chronic inflammatory diseases. The present study was designed to propose an acupoint dBV treatment as a novel therapeutic strategy for respiratory inflammatory disease. Experimental pleurisy was induced by injection of carrageenan into the left pleural space in mouse. The dBV was injected into a specific lung meridian acupoint (LU-5) or into an arbitrary non-acupoint located near the midline of the back in mouse. The inflammatory responses were evaluated by analyzing inflammatory indicators in pleural exudate. The dBV injection into the LU-5 acupoint significantly suppressed the carrageenan-induced increase of pleural exudate volume, leukocyte accumulation, and myeloperoxidase activity. Moreover, dBV acupoint treatment effectively inhibited the production of IL-1β, but not TNF-α in the pleural exudate. On the other hand, dBV treatment at non-acupoint did not inhibit the inflammatory responses in carrageenan-induced pleurisy. The present results demonstrate that dBV stimulation in the LU-5 lung meridian acupoint can produce significant anti-inflammatory effects on carrageenan-induced pleurisy suggesting that dBV acupuncture may be a promising alternative medicine therapy for respiratory inflammatory diseases.

Room: 517 Time: 15:30-15:50

Session 6: Neural Mechanisms of Acupuncture Action in Human *Chair : Younbyoung Chae*

Title: Applying the Power of the Mind in Pain Management

Keywords: Brain imaging, acupuncture, chronic pain, mind-body intervention, expectancy

Name: Prof. Jian Kong
Department: Psychiatry
Affiliation: Massachusetts General Hospital, Harvard Medical School
Country: United States

Biography: Jian Kong is an Associate Professor at the Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School. He is the director of the Neuroimaging Applications to Pain, Alternative Medicine & Placebo program in the Department of Psychiatry at MGH. His research focuses on pain perception and modulation, placebo and nocebo effects, the brain pathophysiology of disorders such as chronic pain, depression, age-related memory decline, and autism, and how non-pharmacological treatments (e.g., acupuncture, mind-body interventions, auricular vagus nerve stimulation, transcranial direct current stimulation) can modulate brain circuitry in these disorders using brain imaging tools such as MRI/fMRI, PET, and MEG. He has published about 140 peer-reviewed articles and book chapters in the above fields.

Abstract: Healing is a complicated process. Theoretically, it may be made up of three components: the self-healing properties of the body (power of the human body), the non-specific effects of treatment (power of the mind), and the specific effect of physical or pharmacological intervention (power of medicine). The final outcome is the combination of all three components. In my talk, I will introduce 1) the role of the power of the mind in acupuncture and how to apply the power of the mind to enhance the therapeutic effects of treatment, 2) how the mind and body can interact to produce treatment effects using mindful movement (Tai Chi and Baduanjin) as examples, and 3) a novel example demonstrating the power of the mind through imagery and its potential role in pain management.

OCT 5TH (SAT), 2019

Room: 517 Time: 15:50-16:10

Session 6: Neural Mechanisms of Acupuncture Action in Human *Chair : Younbyoung Chae*

Title: Personalized Self-Acupressure for Pain and Co-Occurring Symptoms in Cancer Survivors: Efficacy and Mechanism

Keywords: Fatigue, Cancer Survivor, Acupressure

Name: Prof. Richard Harris
Department: Anesthesiology
Affiliation: University of Michigan
Country: United States

Biography: Dr. Harris is an Associate Professor in the Department of Anesthesiology and Associate Professor in the Department of Internal Medicine Division of Rheumatology at the University of Michigan. Dr. Harris has performed research in the field of fibromyalgia and alternative medicine for the past 14 years. His contributions include clinical trial assessment of acupuncture and other alternative medicines, quantification of clinical and experimental pain, and analysis of functional neuroimaging methods including proton magnetic resonance spectroscopy (1H-MRS), functional magnetic resonance imaging (fMRI), and positron emission tomography (PET). This work has added to the existing body of research that suggests that individuals with fibromyalgia have central neurobiological components to their pathology.

Abstract: Fatigue is a common and debilitating late-term effect of breast cancer that is associated with poor sleep and decreased quality of life, yet therapies remain limited. Acupressure has reduced fatigue in previous small studies, but rigorous clinical trials are needed. Here we sought to investigate if 6 weeks of 2 types of self-administered acupressure improved fatigue, sleep, and quality of life vs usual care in breast cancer survivors and to determine if changes were sustained during a 4-week washout period. Our primary outcome was change in the Brief Fatigue Inventory score from baseline to weeks 6 and 10.

Secondary analyses were sleep (Pittsburgh Sleep Quality Index) and quality of life (Long-Term Quality of Life Instrument). We enrolled a total of 424 survivors of stages 0 to III breast cancer who had completed cancer treatments at least 12 months previously were screened, and 288 were randomized, with 270 receiving relaxing acupressure (n = 94), stimulating acupressure (n = 90), or usual care (n = 86). At week 6, the percentages of participants who achieved normal fatigue levels (Brief Fatigue Inventory score <4) were 66.2%(49 of 74) in relaxing acupressure, 60.9%(42 of 70) in stimulating acupressure, and 31.3%(26 of 84) in usual care. At week 10, a total of 56.3%(40 of 71) in relaxing acupressure, 60.9%(42 of 69) in stimulating acupressure, and 30.1%(25 of 83) in usual care continued to have normal fatigue. These effects were statistically significant and clinically relevant. At neither time point were the 2 acupressure groups significantly different. Relaxing acupressure, but not stimulating acupressure, also showed significant improvements in sleep quality compared with usual care at week 6, but not at week 10. Only relaxing acupressure significantly improved quality of life vs usual care at weeks 6 and 10. We conclude that both acupressure arms significantly reduced persistent fatigue compared with usual care, but only relaxing acupressure had significant effects on sleep quality and quality of life. Relaxing acupressure offers a possible low-cost option for managing symptoms in cancer survivors.

Room: 517 Time: 16:10-16:30

Session 6: Neural Mechanisms of Acupuncture Action in Human *Chair : Younbyoung Chae*

Title: Beneficial Role and Neural Correlates of Volitional Breathing in Acupuncture, Qigong, and Self-Training

Keywords: volitional breathing, acupuncture, qigong, neurofeedback training, real time fMRI, cognitive affective processing

Name: Prof. Kyungmo Park
Department: Dept. of biomedical engineering
Affiliation: Kyunghee University
Country: South Korea

Biography: His current research interests, in a broad sense, is to understand the neural mechanism of physiological mind and psychological body using fMRI and to extend the insight to the integrative medical interventions including acupuncture, qigong, meditation and self-healing.
Currently, he has been working in the biomedical engineering department at Kyunghee University since 1999. He received B.S. and Ph.D in Traditional Medicine at Kyung Hee University, Korea in 1994 and 1999 respectively. Also he conducted his research in Martinos Center for Biomedical Imaging in Boston, USA from 2006 to 2011. He has been involved in the development of International Classification of Traditional Medicine of WHO since 2004.
While his lab performs neuroimaging experiments with healthy subjects as well as various clinical conditions including low back pain, facial palsy, cognitive impairment, and functional dyspepsia etc., his students and he intend to investigate the physiological interaction between mind and body. Also they are trying to exploring the self-regulation on neuro-physiological states using real-time fMRI neurofeedback technique. He strongly believe that there's ways for human being to go beyond our evolutionary determinism.

Abstract:

Motivation: For humans, breathing is a motor output of respiratory muscles which are controlled by reflex in the respiratory centers of the brain stem as well as behaviorally in supra-brain stem structures including cortical somatosensory/motor regions. While breathing reflex is observed during rest or typically sleep, breathing can be also modulated volitionally like in emotional events as well as speech. The volitional regulation of breathing has an aspect in terms of behavioral coping to external environments or self-control.
Our group has been conducting a series of experiments that investigated the beneficial roles of volitional breathing when it is coordinately combined with therapeutic interventions; somatosensory stimulation(acupuncture), motor practice(qigong), cognitive/affective training, and self-control of brain by real-time fMRI neurofeedback.

Methods: For sensory respiratory coordination, acupuncture stimulation was behaviorally synchronized by volitional breathing (it was internally coordinated by human subjects) and compared with non-coordinated acupuncture stimulation and breathing gated acupuncture stimulation (it was externally coordinated by the device which automatically detects the inhalation and exhalation of breathing and gates the stimulation timing). For motor respiratory coordination, the motor output of skeletal muscles like facial muscles was coordinated with volitional breathing and compared with non-coordinated control tasks. For testing of cognitive enhancement by volitional breathing, the participants conducted emotional working memory task. Their performance weas compared with the task with non-volitional breathing. Lastly, we used the volitional breathing with real-time fMRI neurofeedback technique and are testing the possibility of self-modulation of brain regional activity including amygdala and functional brain connectivity involved in cognitive/affective processing. All the experiments were done in the functional MRI environment.

Results and discussion: The experiments are still under the analysis or still in progress, we found some interesting and promising findings. We hope the findings provide potential underlying neural mechanisms about its clinical benefits on the various therapeutic interventions; the somatosensory modalities like acupuncture, massage, manipulative techniques, the motor practice modalities like qigong, yoga, meditation, even many other rehabilitations.

Funding: This work was supported by the Korea Institute of Oriental Medicine (grant number: K18052).

OCT 5TH (SAT), 2019

Room: 517 Time: 16:30-16:50

Session 6: Neural Mechanisms of Acupuncture Action in Human *Chair : Younbyoung Chae*

Title: Somatotopically Specific Primary Somatosensory Connectivity to Salience and Default Mode Networks Encodes Clinical Pain

Keywords: functional connectivity, clinical pain, primary somatosensory cortex, pain catastrophizing, chronic low back pain, cross-network connectivity

Name: Jieun Kim
Department: Clinical Medicine Division
Affiliation: Korea Institute of Oriental Medicine
Country: South Korea

Biography: Research scientist in Clinical medicine division, KIOM, 2013-current
Research fellow in Martinos center for Biomedical Imaging, MGH, 2009-2013
PhD in Biomedical Engineering, Kyunghee University, 2009

Abstract: While several studies have found that chronic pain is characterized by increased cross-network connectivity between salience, sensorimotor, and default mode (DMN) networks, a large sample-size investigation allowing a more reliable evaluation of somatotopic specificity and subgroup analyses with linkage to clinical pain intensity has been lacking. We enrolled healthy adults and a large cohort of patients (N=181) suffering from chronic low back pain (cLBP). To specifically link brain connectivity with clinical pain intensity, patients were scanned at baseline and after performing physical maneuvers that exacerbated pain. Compared to healthy adults, cLBP patients demonstrated increased connectivity between the functionally-localized back representation in primary somatosensory cortex (S1back) and both salience and DMN networks. Pain exacerbation maneuvers increased S1back connectivity to salience network regions, but decreased connectivity to DMN, with greater pain intensity increase associated with greater shifts in these connectivity patterns. Furthermore, only in cLBP patients reporting high pain catastrophizing, DMN connectivity was increased to a cardinal node of the salience network, anterior insula cortex, which was correlated with increased post-maneuver pain in this cLBP subgroup. Hence, increased information transfer between salience processing regions, particularly anterior insula, and DMN may be strongly influenced by pain catastrophizing. Increased information transfer between salience network and S1 likely plays an important role in shifting nociceptive afference away from self-referential processing, re-allocating attentional focus and affective coding of nociceptive afference from specific body areas. These results demonstrate S1 somatotopic specificity for cross-network connectivity in encoding clinical back pain, and moderating influence of catastrophizing for DMN/insula connectivity.

Room: 520 Time: 10:00-10:30

Session 7: Acupuncuture & Pharmacopuncture Practice *Chair : Young-Il Kim*

Title: Efficacy and Safety of Thread Embedding Acupuncture for Chronic Low Back Pain: a randomized controlled pilot triall

Keywords: Thread-embedding acupuncture, Acupuncture, Chronic low back pain

Name: Hyun-Jong Lee
Department: Department of Acupuncture and Moxibustion medicine
Affiliation: College of Korean Medicine, Daegu Haany University
Country: South Korea

Biography: Lee Hyun-Jong graduated from Kyung Hee University in 2000. I trained at the Korean Medicine Hospital of Kyung Hee University. Since 2007, I have worked for Jaseng Korean Medicine Hospital for 5 years. I am a professor at Daegu Haany University since 2012. I have conducted research on thread embedding acupuncture for musculoskeletal disorder since 2015.

Abstract:

Objectives: We investigated the efficacy and safety of thread-embedding acupuncture (TEA) for chronic low back pain (LBP) in a randomized controlled pilot trial with the aim of laying the foundation for a large-scale randomized controlled trial on this topic.

Methods: Forty participants were recruited for two-arm, assessor-blinded randomized controlled pilot trial. The participants were randomly allocated to a TEA group (experimental group) or an acupuncture group (control group). The TEA group received TEA once every 2 weeks for 8 weeks (four sessions in total), while the acupuncture group received acupuncture twice per week for 8 weeks (16 sessions in total). The primary outcome was the visual analog scale (VAS) score for pain and the secondary outcomes were short-form McGill Pain Questionnaire (SF-MPQ) and Oswestry Disability Index (ODI) scores. Assessments were performed at screening and at 2, 4, 6, 8, and 10 weeks after treatment initiation (the 10-week assessment was conducted at 2 weeks after treatment cessation).

Results: Of the 40 participants, 36 completed the study and four dropped out. Both the TEA group and the acupuncture group showed significant improvements in VAS, SF-MPQ, and ODI scores in a time-dependent manner. Furthermore, with regard to ODI, a significant interaction between group and time was observed, with the two groups exhibiting a different pattern of change at 8 weeks according to contrast analysis with Bonferroni's correction. No serious adverse event occurred, and hematological and biochemical test findings were within normal limits.

Conclusion: This pilot study has provided basic data for a larger clinical trial to demonstrate the efficacy and safety of TEA for chronic LBP.

OCT 6TH (SUN), 2019

Room: 520 Time: 10:30-10:50

Session 7: Acupuncuture & Pharmacopuncture Practice *Chair : Young-Il Kim*

Title: Amyotrophic Lateral Sclerosis Treatment Using Acupuncture, Pharmacopuncture and Herbal Medicine (Mecasin)

Keywords: Amyotrophic Lateral Sclerosis (ALS), Acupuncture, Pharmacopuncture, Mecasin

Name: Prof. Sungchul Kim
Department: Acupuncture & Moxibustion department, Wonkwang University Korean Medicine Hospital
Affiliation: Wonkwang University
Country: South Korea

Biography: Sungchul Kim, KMD,PhD is a professor at Wonkwang University, and a chief at ALS Centre, Wonkwang University Gwangju Korean Medicine Hospital. He had practiced as a Korean Medicine Doctor for ALS for 10 years. His interest is in development of new drugs for ALS. He has many presentations, papers, and posters to his credit.

Abstract: ALS , often referred to as " Lou Gehring's Disease," is a progressive disorder that causes degeneration of the motor neurons in the spinal cord, brain stem, and motor cortex that control the voluntary muscle movement.

The average ALS patient's life span is less than three years from when symptoms first appear. Unfortunately ALS is progressive disease until death. The significant symptoms of ALS include muscle spasticity, muscle weakness, paralysis, fasciculation, impaired speaking, swallowing and breathing. Acupuncture treatments showed the high correlation with K-ALSFRS-R score and Sa-am acupuncture lung tonification. And Sa-am acupuncture lung tonification would be more effective on early stage of ALS disease. We found that Pharmacopuncture of Bee venom, Scolopendrid and Hominis Placenta attenuates neuroinflammatory events and extends survival in ALS models. We observed that Mecasin, a novel antineuroinflammatory Agent, inhibits neuroinflammatory responses and Mecasin exerts a neuroprotective effect by ameliorating oxidative stress via heme oxygenase-1 upregulation. According to analysis of clinical trial, the low dose or high dose mecasin group showed better results than the riluteck control group.

Room: 520 Time: 10:50-11:50

Session 7: Acupuncuture & Pharmacopuncture Practice

Chair : Young-Il Kim

Title: Pain Treatment: the Scalp-Luò technique

Keywords: Pain treatment, Scalp-Luò Technique, novel combination

Name: Prof. Mauro Devecchi
Department: Scalp Acupuncture
Affiliation: AMAB Association of Medical Acupuncturists of Bologna
Country: Italy

Biography: Mauro Devecchi MD, LAc

Mauro Devecchi is a physician, graduated in Milan University of Medicine in 2008. He studied Acupuncture in Florence University and also he licensed in AMAB Italian-Chinese School of Acupuncture of Bologna, Institutional member of SAR (Society for Acupuncture Research).

His principal activity is clinical practice, as he is the chief of Acupuncture service of Demetra ART Center in Florence, Italy.

He is also passionate in research, and his major research interest are fertility,neurology and pain treatment. He participated as a lecturer to many national and international Congresses of Acupuncture.

Actually he is a teacher of AMAB Italian-Chinese School of Acupuncture and is the responsible of the Scalp Acupuncture department.

He has been task leader of the CHETCH research project (China and Europe taking care of Healthcare Solutions), financed by the European Commission with the 7th Framework Programme – People Marie Curie Actions- IRSES, whose aim is promote the integration of Acupuncture and TCM in the European public healthcare systems.

Abstract:

Objective: Many studies demonstrated the efficacy of acupuncture in pain treatment. Different acupuncture techniques can be used to control pain (Traditional Acupuncture, Microsystems like ear, abdominal,scalp, etc..) and in resistant pain a combination of them can be more effective.

Methods: In this speech a novel approach to pain treatment, the Scalp-Luò technique,will be presented, with a combination of a specific technique of traditional acupuncture and scalp acupuncture.

A practical demonstration will be held.

Conclusions: this simple but very effective approach could give a contribution in pain treatment, particularly in complicated cases that are resistant to traditional techniques.

OCT 6TH (SUN), 2019

Room: 520 Time: 13:00-13:20

Session 8: Acupuncture & Moxibustion

Chair : Mi-Suk Kang

Title: Acupuncture and Moxibustion in Sports Injuries

Keywords: acupuncture, moxibustion, inflammation, sports injuries, healing

Name: Dr. Benedict Francis Valdecanas
Department: Aegle Sports Science
Affiliation: Aegle Wellness Center
Country: Philippines

Biography: He is the Past President of the Philippine Orthopaedic Society for Sports Medicine (POSSM),

a Board Member of the Asean Society for Sports medicine & Arthroscopy (ASSA) and the Asia Pacific Knee Arthroscopy & Sportsmedicine Society (APKASS)

He is the Former Chairman of the Department of Orthopaedics in Cardinal Santos Medical Center and a faculty of the Philippine Center for Advanced Surgery (PCAS)

He is the Founding Medical Directer of Aegle Wellness Centre.

Likewise, he holds the position of Associate Professor with the European Council for Aging Research and Education (ECARE)

In addition, he is a diplomate of the Philippine Board of Orthopaedics (PBO), a Fellow of both Philippine Orthopaedic Association (POA) and the Philippine College of Surgeons (PCS).

He had his residency at the St. Luke's Medical Center Institute of Orthopaedics & Sports Medicine.

and Fellowship in Sports Medicine and Arthroscopy at the Baptist Medical Center in San Antonio, Texas, USA.

He had his postgraduate training in Hyperbaric Medicine in Hermann Hospital in Houston Texas.

He holds Masteral degrees in Molecular and Cell Biology from the University of the Philippines and Epidemiology from the Ben Taub Research Center, Baylor College of Medicine in Houston, Texas.

And lastly, decided to focus on private practice and on regenerative medicine research for both hospital and clinical setting.

Abstract: Sports injuries are very common, not only among professional athletes, but moreso among those professionals and students who would like to maintain an active lifestyle but only have time during weekends for their favorite sports. These athletic injuries may range from minor sprains to actual muscle tears that require weeks of anti-inflammatory treatment. Age-old acupuncture and moxibustion techniques can actually provide better and faster pain relieving methods that can also facilitate healing with minimal intervention.

After the initial application of sports medicine protocols for the acutely injured athlete, immediate daily follow up treatments with moxybustion and acupuncture helps in getting the athlete back to training earlier and more comfortably than any medication currently employed by the conventional physiatrist. A perfect example of the multiplicatory effect of east meets west in the field of sports medicine.

Room: 520 Time: 13:20-13:40

Session 8: Acupuncture & Moxibustion *Chair : Mi-Suk Kang*

Title: Review on Korean Medicine Clinic at Polyclinic during 2019 FINA World Championships

Keywords: Sports Korean Medicine, Sports medicine, acupuncture, sports injury, FINA, world championships

Name: Hyun-Joon Lee
Department: Director
Affiliation: Society of Sports Korean Medicine
Country: South Korea

Biography: Currently working as a financial director for Society of Sports Korean Medicine and as a medical committee member of Korean Volleyball Association. Participated in the various international sports events to treat athletes with acupuncture and Chuna manual medicine.

Abstract:

Objectives:This study was designed to analyze the usage of medical service support in Korean Medicine Clinic at the polyclinic during 2019 FINA world championships period for furthermore study.

Methods: We recorded the daily occurrence of injury and illness through the electrical medical record used in Korean Medicine Clinic arranged in the polyclinic at Athletes' Village during the period of 2019 FINA world championships.

Results: Among the 3080 cases reported at the polyclinic from July 5th to 29th in 2019, 1135 cases were treated in Korean Medicine clinic and this is about 36.8% of all the cases, the leading percentage in the polyclinic. In 1135 cases, the category of athletes were 509 cases (44.8%), the category of team officials were 221 cases (19.4%) and the category of FINA family were 92 cases (8.1%).
Nationality of Russia was the most with 72 cases, and nationality of Republic of South Africa was the 2nd most with 69 cases.
Respectively the ratio of injury among the patient visited the clinic was 89% (n=1010), and the illness was 10.6% (n=120). Respectively 48% of people(n=543) who visited the clinic had an experience of acupuncture treatment before and 52% (n=592) of people never experienced before.
The frequency of treatment method used in the clinic was chuna manual medicine(64%), acupuncture(64%), and cupping(16%) in order. The frequency in location of body part treated was body trunk (n=516, 49%), lower limbs (n=205, 18%), upper limbs (n=145, 12.8%) and head & neck (n=93, 8.2%) in order.

Conclusions: The clinic using acupuncture established inside the polyclinic during the sports events hosted by the Federation Internationale de Natation was the first time ever in 2019 world championships. So the presented data constitute the basis for future analysis and study. Korean Medicine is likely to be effective in terms of the medical assistance for the international sports level of athletes, however further study is needed.

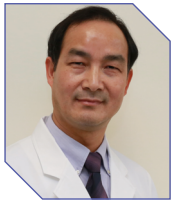
OCT 6TH (SUN), 2019

Room: 520 Time: 13:40-14:00

Session 8: Acupuncture & Moxibustion *Chair : Mi-Suk Kang*

Title: Acupuncture and Related Therapies for the Management of Psychological and Psychiatric Disease: From Ancient Healing Art to Modern Sciences

Keywords: Acupuncture; mental disease; clinical trial; TCM



Name: Prof. Zhang-Jin Zhang
Department: School of Chinese Medicine
Affiliation: The University of Hong Kong
Country: Hong Kong

Biography: Professor Zhang is a Full Professor and the Associate Director for Clinical Affairs in School of Chinese Medicine of the University of Hong Kong (HKU). He is a Vice-President of Hong Kong Scientist Association, Deputy Director of TCM Psychology Specialty Committee of World Federation of Chinese Medicine Societies (WFCMS). He received his Chinese medicine, acupuncture and Western medicine training and earned his PhD in neuroscience in China. In 1994-2006, he moved to the United States to continue his research work in psychopharmacology and clinical psychiatry. His long-term research interest has focused on seeking novel agents and developing effective treatment strategies from acupuncture and herbal medicine for neurological and mental disorders, including anxiety, mood disorders, dementia, and schizophrenia. He is also interested in investigating neural mechanisms of acupuncture. Professor Zhang has directed numerous clinical trials and authored over 130 research papers and reviews. He has delivered over 200 seminars and public lectures since 2006. He is actively practicing as a registered Chinese medicine practitioner in Hong Kong and highly reputed for his specialization in acupuncture and Chinese medicine treatment of neurological and psychiatric diseases.

Abstract: There have been numerous psychological and psychiatric terms recorded in traditional Chinese medicine (TCM) bibliographies, developing a TCM specialty called mental-emotional diseases, where symptomatology, etiology, psychopathology, and various therapies are well established. Acupuncture and related therapies, such as acupressure, moxibustion, massage, cupping, scraping, psychological consultant, exercise therapy (e.g., tai-qi), meditation, and mindfulness were often used in the management of mental disease and wellbeing in early days. These therapies also have been increasingly introduced into today's clinical practice of psychiatry, aiming to enhance the clinical efficacy, reduce side effects associated with conventional treatment, and comorbid symptoms. Over the past two decades, the speaker and other researchers have published a large number of clinical trials that have demonstrated the effectiveness of acupuncture in the treatment of insomnia, depression, anxiety, obsessive compulsive disorder (OCD), cognitive impairment, drug abuse, and psychotic disorders. Neuroimaging, neurochemical, and omic evidence further reveals the underlying mechanisms of psychotropic effects of acupuncture. This talk will provide an overview of ancient TCM psychological concepts and therapies, evidence-based findings obtained from preclinical and clinical studies, and the putative mechanisms of acupuncture effects in the treatment of psychological and mental diseases.

Room: 520 Time: 14:00-14:20

Session 8: Acupuncture & Moxibustion *Chair : Mi-Suk Kang*

Title: Characteristics of and Changes in Biopotentials on the Skin at Acupuncture Points Due to Acupuncture Stimulation

Keywords: Biopotential, Meridian, Acupuncture Point, Variability, Acupuncture Stimulation

Name: Seong Jin Cho
Department: Clinical Medicine Division
Affiliation: Korea Institute of Oriental Medicine
Country: South Korea

Biography: I have a BS in Physics Education from Seoul National University and a MS in Physics from Korea Advanced Institute of Science and Technology. I joined Korea Institute of Oriental Medicine in 2010 as a researcher. Most of my research is related to biosignals such as biopotential and EEG.
Title: Characteristics of and Changes in Biopotentials on the Skin at Acupuncture Points Due to Acupuncture Stimulation

Abstract:

Objective: Although studies on the efficacy of acupuncture treatment have been published in various fields, an understanding of the mechanisms is still insufficient. In particular, some studies on signal transmission have been conducted, but there is little research on the energy transmission. In this study, we observed changes in electrical energy by measuring the biopotential on acupuncture points. Methods: The biopotential of five transport points and nearby nonacupuncture points in twelve meridians was measured. The measurement was continuously performed for 10 minutes 4 times (sections 1, 2, 3, and 4) with a 5-minute rest between each measurement. In the acupuncture stimulation experiment, the needle was inserted after section 1 and removed after section 3. After preprocessing the recorded data, the changes in the biopotential level and variability due to acupuncture stimulation were examined, and the biopotential difference between the acupuncture and the nonacupuncture points was compared. Results: The biopotential tended to increase after acupuncture stimulation at well, brook, and stream points but tended to decrease at river and sea points. Additionally, the variability in biopotential increased considerably after acupuncture stimulation, which means that the electrical activity of the acupuncture point was increased by acupuncture stimulation. Finally, the biopotential of the brook point was lower than that of the nonacupuncture point beside it, whereas the biopotential of the river point was higher than that of the nonacupuncture point beside it. These results suggested that an electric field at the brook point was formed in the direction from the nonacupuncture point to the acupuncture point and reversed at the river point. Conclusion: The distribution and changes in biopotential at five transport points are consistent with the energy flow theory in Korean medicine. Thus, the study on biopotentials can provide a foundation for research on energy flow mechanisms in Korean medicine.

OCT 6TH (SUN), 2019

Room: 520 Time: 14:30-14:50

Session 9: Veterinary Acupuncture *Chair : Min Su Kim*

Title: Primo Vascular System in Animals, its Characteristics and Clinical Application

Keywords: Primo Vascular System, Animal, Acupuncture Meridian, Motility Pattern

Name: Prof. Kwang-Sup Soh
Department: Department of Physics and Astronomy
Affiliation: Seoul National University
Country: South Korea

Biography: Dr. Kwang Sup Soh is currently an Emeritus Professor and was a Professor in the Department of Physics and Astronomy at the Seoul National University from 1979 to 2011, where he led the Biomedical Physics Laboratory. He got BS in Physics in 1968 at Seoul National University, and PhD in high energy theoretical physics in 1974 at Brown University in USA. Professor Soh has authored or coauthored more than 60 journal papers on primo vascular system (PVS) and made numerous invited lectures nationally and internationally. Professor Soh began his research on the PVS which was first discovered by Dr. Bong-Han Kim who reported to have discovered the anatomical structures corresponding to acupuncture meridians. Dr. Soh's initiative in the research of the PVS led to many following researches in Korea and abroad. He organized the first international conference named "The International Symposium on the Primo Vascular System" held in 2010 in Korea. He was the editor of the conference book "The Primo Vascular System, its role in Cancer and Regeneration" published by Springer in 2011.

Abstract: Although researches on the primo vascular system (PVS) were mainly done with mice and rats there have been some experiments with other animals such as rabbits, dogs, pigs, sheep, cow and horses. Especially rabbits were used by BongHan Kim, the discoverer of the PVS, and in the beginning of the author's laboratory because of the size of the animal is convenient for the observation of the PVS. Other animals than rabbits, rats and mice were only sporadically used for the PVS of some specific organs. The sizes and structures of the PVS of the various animals were similar despite the different sizes of the animals. The staining properties of their PVS were also same. Thus, the PVS seemed a universal anatomic structure of animals like blood or lymph vessels. In this presentation we propose the methods to detect and observe the PVS network throughout an animal's entire body and the criteria for identification of the PVS samples. In addition, we introduce a clinical palpation technique which was developed or inspired by the motility characteristics of the PVS.

Room: 520 Time: 14:50-15:10

Session 9: Veterinary Acupuncture *Chair : Min Su Kim*

Title: Do or Don't: Acupuncture Treatment for Cancer Patients

Keywords: Small animal Cancer, syndrome-based acupuncture, Saam Traditional Korean Medicine (TKM)

Name: Prof. Keum Hwa Choi
Department: College of Veterinary Medicine, Veterinary Medical Center
Affiliation: University of Minnesota
Country: United States

Biography: Keum Hwa Choi received her Degree of Veterinary Medicine from the University of Seoul, M.Sc in Veterinary Microbiology from Seoul National University, and Ph.D in Veterinary Pathobiology from the University of Minnesota, and she completed her post-doctoral research in veterinary immunology and molecular biology at the University of Minnesota. She worked as a research scientist at the Veterinary Research Institute in Anyang, Korea and as a visiting scientist at the Pasteur Institute in Paris, France. Dr. Choi has trained in Traditional Oriental Medicine in the USA, China, and Korea and received an MS in Oriental Medicine in the USA and diplomate of the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM). She is a licensed acupuncturist in Minnesota, USA.
Dr. Choi founded the Complementary & Alternative Medicine (CAM) department at the College of Veterinary Medicine, University of Minnesota in 2000, where she has served as a section chief and a course coordinator. Dr. Choi has been teaching on integrative medicine and providing senior clinical rotations in Traditional Veterinary Medicine at the University of Minnesota. Dr. Choi also provides treatment for human patients at her private clinic. Her primary interest in research is using a variety of medical modalities, specifically Saam Traditional Korean Medicine, in small animal as well as human cancer patients. She is also performing clinical research in small animal and human diseases, and her work has been published in peer-reviewed journals and proceedings. She is one of few clinicians practicing both human and veterinary Traditional Medicine. Dr. Choi served as a vice president and president of the American Academy of Veterinary Acupuncture (AAVA) and is a board member for the Minnesota Acupuncture Association at present. Dr. Choi has given many lectures and presentations both internationally and domestically.

Abstract: Cancer is one of the leading causes of mortality in humans as well as animals. Although genetic predisposition plays a substantial role, hereditary factors are only responsible for around 5% of cancer outbreaks; the other 95% of cancer outbreaks occur sporadically during an individual's lifetime. Early screening tests are recommended but those tests do not always detect cancer successfully due to limited sensitivity and specificity. In small animal oncology, early screening is even more limited than in the human population. The Complementary & Alternative Medicine department at the College of Veterinary Medicine, University of Minnesota provides several medical modalities including syndrome-based acupuncture, which is the most traditionally and widely used acupuncture, Saam Traditional Korean Medicine (TKM), herbal treatment, and food therapy for small animal cancer patients. We have learned that the analysis of both innate and adopted constitutional imbalances of each patient forms the critical step for diagnosis and for setting up the treatment principle.
Syndrome-based acupuncture has been provided for patients undergoing chemotherapy or radiation therapy to alleviate adverse effects from conventional treatments. In contrast, Saam TKM has been applied at any stage of cancer because it has provided a proficient way to identify the constitutional imbalances of each patient. Saam TKM may thus be a more effective medical treatment for cancer patients by re-balancing their imbalanced innate as well as adopted constitutions. For effective cancer treatment in both small animals and humans, long-term care along with follow-up treatment is required for improving survival rates and quality of life. Based on clinical investigation, Saam TKM could provide a potential acupuncture treatment for achieving these goals. In this session, small animal cancer cases treated with syndrome-based acupuncture and Saam TKM acupuncture will be presented and discussed.

OCT 6TH (SUN), 2019

Room: 520 Time: 15:10-15:30

Session 9: Veterinary Acupuncture *Chair : Min Su Kim*

Title: The Ameliorating Effect of Pharmacopuncture in Chemotherapy-Induced Neuropathy

Keywords: oxaliplatin-induced peripheral neuropathic pain; Bee venom, Scolopendra subspinipes; pharmacopuncture; mechanical allodynia; clonidine

Name: Dr. Seo-Yeon Yoon
Department: College of Korean Medicine
Affiliation: Dongshin University
Country: South Korea

Biography:
Education;
03/2001 -02/2007 M.S.-Ph.D. in Veterinary Physiology, College of Veterinary Medicine, Seoul National University, Seoul, Republic of Korea
03/1997-02/2001 D.V.M., College of Veterinary Medicine, Konkuk University, Seoul, Republic of Korea
03/1993-02/1997 B.S. in Physics, Ewha Womans University, Seoul, Republic of Korea Research interests; Mechanism for development and modulation of chronic neuropathy as well as other neurophysiological/pathological phenomena
- Acupuncture's analgesic mechanism
- The mechanism of chemotherapy-induced peripheral neuropathy
- The interaction between peripheral nerve and immune cells in neurodegeneration and regeneration

Abstract:

Objective: Chemotherapy-induced peripheral neuropathy (CIPN) is a common dose-limiting side effect of anticancer drugs but lacks an effective treatment strategy. Bee venom or Scolopendra subspinipes (SS) has been used in traditional medicine to treat chronic neuronal diseases. Moreover, pharmacopuncture with BV (BVP) or SS (SSP) produces potent analgesia in humans and experimental animals. In this study, we examined the effect of BVP or SSP into the ST36 acupoint on oxaliplatin-induced mechanical allodynia in mice.

Methods: Mice were given a single administration of oxaliplatin (10m/kg) at day 0. At day 14, BVP or SSP was injected into ST36 acupoint and mechanical withdrawal thresholds for hind paws were measured for 4 hours.

Results: Acupoint treatment with BVP or SSP significantly reduced mechanical allodynia produced by a single oxaliplatin injection, which was completely prevented by acupoint pre-injection of lidocaine. Intrathecal treatment with yohimbine, an α2-adrenoceptor antagonist, prevented the anti-allodynic effect of BVP or SSP. On the other hand, a high dose of clonidine, suppressed oxaliplatin-induced mechanical allodynia, but produced severe side effects including hypotension, bradycardia, and motor impairment. Combination of BVP or SSP with a lower dose of clonidine produced a comparable analgesic effect without side effects.

Conclusion: Our findings demonstrate that BVP or SSP produces an analgesic effect in oxaliplatin-induced pain via neuronal conduction at the acupoint and activation of spinal α2-adrenoceptors. Moreover, a combination of low-dose clonidine with BVP or SSP represents a novel and safe therapeutic strategy for chemotherapy-induced chronic pain.

Room: 520 Time: 15:30-15:50

Session 9: Veterinary Acupuncture

Chair : Min Su Kim

Title: Release of Mesenchymal Stem Cell Induced by Electroacupuncture Stimulation in Central Nervous System

Keywords: Acupoints, Electroacupuncture, mesenchymal stem cell (MSC), Rat, wound repair

Name: Prof. Min Su Kim
Department: Department of Veterinary Clinical Science
Affiliation: College of Veterinary Medicine, Seoul National University
Country: South Korea

Biography: Dr. Min Su Kim received his DVM from Kyungpook National University of Veterinary Medicine and PhD degree from the Seoul National University in 2006 with acupuncture and surgery studies. Then, he completed internship in acupuncture, at the University of Florida (UF) Veterinary Medical Center. He was professor at veterinary surgery section in College of Veterinary Medicine, Chonbuk National University. Now He has been working College of Veterinary Medicine, Seoul National University and has been working a research professor at Indiana Medical School. He has authored over 5 books of veterinary surgery and traditional veterinary medicine and published over 90 papers on the veterinary surgery and acupuncture effect in the peer-reviewed journals. He has been working as academic committee chair in both Korean Society of Veterinary Surgery (KSVS) and Korean Society of Traditional Veterinary Medicine (KSTVM). He has been doing one of the major speakers and instructors at the Asian traditional veterinary medicine course (South Korean and Beijing).

Abstract:

Objectives: This study is related to stimulate of mesenchymal stem cell (MSC) release into blood by use of electroacupuncture (EA) at specific acupoints.
Methods: EA was performed in rats using LI4, Li11, GV14, and Baihui (rats).

Results: Through some methods such as functional magnetic resonance imaging (fMRI) and pharmacological disinhibition of hypothalamus, the activation of the sympathetic nervous system resulted in a release of MSC into the circulation. In addition, EA treatment in rats that had partial rupture of the Achilles tendon induced analgesia, increasing interleukin-10 levels and remodeling.

Conclusion: EA as low risk, and very effective method should be used to support the repair of tissue wound by increasing of the circulating MSC.

OCT 6TH (SUN), 2019

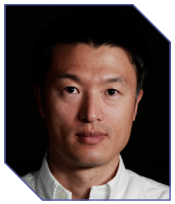
Room: 520 Time: 16:00-16:20

Session 10: Cannabis Research

Chair : Su-Dong Kim

Title: Therapeutic Implications of Cannabidiol for Humans

Keywords: Cannabis, Cannabinoids, Cannabidiol, Epilepsy



Name: Dr. Sang-Hyuck Park
Department: Institute of Cannabis Research
Affiliation: Colorado State University - Pueblo
Country: United States

Biography: Dr. Park completed his B.S. in microbiology at Chung-Nam National University, South Korea, his M.S. in Plant Pathology at the University of Arkansas, Fayetteville, and his Ph.D. in Plant, Soil and Microbial Sciences at Michigan State University. As a postdoctoral fellow, he joined the Department of Plant Sciences at the University of Arizona. Before joining the Cannabis research team, he worked for 2 years at the Genomics and Bioinformatics Research Unit, United States Department of Agriculture (USDA)-Agriculture Research Service (ARS) as a molecular biologist.
Since 2018, Dr. Park has served as a senior scientist/research liaison in the Institute of Cannabis Research (ICR). Dr. Park has been leading a multi-tiered research project to seek insights into fundamental cannabis biology and cannabinoid chemistry. Additionally, he conducts a variety of research projects to explore the unknown therapeutic uses of cannabidiol (CBD). More therapeutic explorations of individual cannabinoids and in the mixture with other minor cannabinoids are planned to utilize different human cell lines and mice model system.

Abstract: Cannabis sativa L. has long been used as an agricultural commodity for fiber and seed oil production. Recently, these plants have garnered public attention due to their therapeutic potential. Cannabidiol (CBD) is one of the naturally occurring cannabinoids in the cannabis plant. CBD is a potent regulator of neurotransmission, indirectly modulating a number of neurological and psychiatric responses by interacting with both cannabinoid receptors (CB1 and CB2) and non-CB receptors (e.g., vanilloid-type 1 receptor, 5-hydroxytryptamine (5-HT), and γ-aminobutyric acid (GABA)). Unlike Δ-9-tetrahydrocannabinol (THC), CBD has no psychoactivity, exhibiting no effects indicative of any potential for abuse or dependence. Over the past decades, CBD has been studied for its therapeutic potential as an anti-inflammatory, antioxidant, neuroprotectant, anticonvulsant, anti-panic, anxiolytic, antidepressant, analgesic, anti-tumoral agent, and anti-psychotic substance. In mice infected with the Dravet syndrome, CBD effectively reduced seizures and autistic-like social behaviors. The effects CBD exhibited were mediated through antagonism of the non-CB receptor, G protein-coupled receptor (GPR) 55. Additionally, recent clinical studies have also supported the mouse study and found that CBD tremendously reduced the frequency and severity of chronic seizures while increasing the quality of life in humans with epilepsy. CBD is not only limited to the treatment of epilepsy but also shows efficacy for a wide array of different human disorders, ranging from cancer to chronic neuropathic pain, which reflects the broad spectrum of molecular targets. With the legalization of cannabis for medicinal purposes globally, an increase in pre-trials and clinical trials are anticipated and should facilitate exploration of the unknown therapeutic functions of phytocannabinoids.

Room: 520 Time: 16:20-16:40

Session 10: Cannabis Research

Chair : Su-Dong Kim

Title: Cannabinoid Synthesis and Accumulation in Glandular Trichomes of Cannabis Sativa

Keywords: Cannabis, cannabinoid, glandular trichome, lipoplast, secretory cavity, terpene

Name: Prof. Eun Soo Kim
Department: Korea Hemp Institute
Affiliation: Konkuk University
Country: South Korea

Biography: Dr. Kim received his bachelor's degree in horticultural science from the Korea University, and his M.S and Ph.D. in Plant Morphology at the Biology Department at Korea University. He has a long history with Cannabis research, which includes his postdoctoral work with Dr. Paul Mahlberg at the Biology Department at Indiana University. This was one of the very few Cannabis research projects in the US, which already began in the 1970s. During his work with Dr. Mahlberg, Dr. Kim investigated mechanisms of cannabinoid production. He is an expert in medicinal plant research including Panax and Cannabis. He has established the first research institute of hemp in Korea, Korea Hemp Institute, with thirty faculty members of ten universities. As the director and the principal researcher, Dr. Kim has been leading many domestic and international research projects with industrial hemp during the past thirty years. Dr. Kim has created the College of Bioscience and Bioengineering at Konkuk University, and he has served as the first dean of that college. He also showed his leadership through the academic activities of Botanical Society of Korea, and Korean Society of Microscopy as the vice president of both societies.

Abstract: Glandular trichomes are known to be the sites of cannabinoid accumulation in Cannabis sativa. They cover the surface of the aboveground plant parts but are most abundant on the floral bracts of pistillate plants. This study conducted to determine where the cannabinoids are synthesized and localized at the whole-plant level and at the cellular level using micromanipulation and transmission electron microscopy.
According to their external features, three types of glandular trichomes are recognized: bulbous, capitate-sessile, and capitate-stalked trichomes. The gland head consist of disc cells containing cytoplasm and a non-cellular intrawall secretory cavity. The lipoplasts in the disc cells of globose heads synthesize lipophilic terpenes that migrate through the plasma membrane and into the cell wall adjacent to the secretory cavity. They subsequently pass through the cell wall and accumulate in the secretory cavity in the form of secretory vesicles. Numerous vesicles of different sizes and densities are localized in the secretory cavity.
In conclusion, lipophilic terpenes and phenols, when released from their respective lipoplasts and vacuole compartments, accumulate in the plasma membrane/cell wall interface, where enzymes combine these precursors into cannabinoids. Mature glands possess the highest concentration of major cannabinoids, such as CBD in the fiber strains and THC in the drug strains of Cannabis sativa.

OCT 6TH (SUN), 2019

Room: 517 Time: 10:00-10:50

Session 11: Saam Acupuncture Method

Chair : Dongwoo Nam

Title: Principle of Saam Five Element Acupuncture

Keywords: Saam, Five Element, Acupuncture

Name: Prof. Sanghoon Lee
Department: Acupuncture & Moxibustion
Affiliation: Kyung Hee University College of Korean Medicine
Country: South Korea

Biography: Dr. Sanghoon Lee is Professor of Acupuncture & Moxibustion, Director of International Education Institute of Korean Medicine, and Deputy-Director of WHO Collaborating Centre for Traditional Medicine at Kyung Hee University.
He achieved academic degrees of PhD, Master, Bachelor of Korean Medicine (Acupuncture) at Kyung Hee University and MPH at Seoul National University School of Public Health. He also worked at Johns Hopkins School of Medicine as a postdoc and instructor for two years.
Dr. Lee was awarded for his research and clinical accomplishments by Kyung Hee University Medical Center, Society for Integrative Oncology, Korean Oriental Medical Society, and Korean Society of Acupuncture & Moxibustion.
His expertise and research interests include modernization of classical acupuncture theory, integrative medicine, biofeedback, holistic approach to autonomic nervous system disorders, etc.
He co-authored international books or chapters including "Integrative Gastroenterology" (Oxford University Press), "Integrative Weight Management"(Humana Press, Springer), "Integrative Oncology"(Human Press, Springer), "Saam Five Element Acupuncture" (Jimoondang), etc. He has made more than 50 international lectures on acupuncture-related topics in the world and participated in many WHO activities for Traditional Medicine as an acupuncture expert.

Abstract: Saam five element acupuncture (SA) was developed by Saam Doin in the 17th century during Chosun Dynasty of Korea. It is often called as four-needle technique or five element acupuncture in other countries.
The principle is originated from Nanjing (The classic of difficulties) Chapter 69. For example, if liver meridian is in deficiency, reinforce the water as mother to boost its child wood. Saam added reducing the metal as wood's controller to block metal's suppressing effect on wood.
On the contrary, if liver meridian is in excess, reduce the child fire to consume wood energy by fire in the nourishing cycle. Saam added reinforcing the metal to strengthen metal's control over wood.
In my opinion, there can be three ways to select the target treatment meridian; the pathway of meridian, five element theory, and six energy system.
SA is a meridian-based approach using five element points. Its strength is a holistic and systematic balancing of organ functions rather than pure stimulation on the local lesion.
It is a treasure of Korean acupuncture which needs to be inherited and developed for more active application to various disorders.

Room: 517 Time: 10:50-11:20

Session 11: Saam Acupuncture Method

Chair : Dongwoo Nam

Title: A Review of Clinical Researches on Saam Acupuncture

Keywords: Saam acupuncture treatment, effect and safety, clinical evidence, review

Name: Prof. Joo-Hee Kim, MD.(KM) PhD
Department: Department of Acupuncture and Moxibustion Medicine
Affiliation: College of Korean Medicine, Sangji University
Country: South Korea

Biography: Dr. Joo-Hee Kim is a Professor in the department of Acupuncture & Moxibustion of College of Korean Medicine at Sangji University and a faculty staff member of Sangji University Korean Medical Hospital. She achieved academic degrees of Ph.D., Master, Bachelor of Korean Medicine (Acupuncture) at Kyung Hee University. She also worked at Korea Institute of Oriental Medicine (KIOM), Government-funded research Institute as a senior researcher and Principal Investigator.
Primary focuses of her researches are investigating the clinical effect and safety of acupuncture for treating various chronic refractory diseases including cancer, musculoskeletal disease, and mental disorders, elucidating its mechanism using integrated multi-omics approaches as well as experimental studies, and incorporating different treatment methods in the western medical setting as well as traditional interventions such as the moxibustion, pharmacopuncture, herbs, etc. to find the optimal treatment regimen.

Abstract: Saam acupuncture (SA) is a unique acupuncture treatment based on traditional Korean medical principles. The traditional theory about yin and yang, five elements, meridians are used in the application of SA. In particular, it uses the combination of five shu points for deficiency and excess of the meridians.
After the diagnosis is made, the doctor principally selects four acupuncture points located below the elbow and knee joint and this makes SA an especially convenient and strong effective tool to patients.
SA is a popular and safe treatment intervention widely applied in clinical practice to manage various conditions including musculoskeletal pain, mental disorder, and chronic, functional diseases. There are several previous studies related to SA for peripheral neuropathy, hwa-byung, amyotrophic Lateral Sclerosis, and so on. Pubmed and Korean databases were searched for clinical studies about SA treatment, and published articles related to SA and clinical trials, case studies are presented in this review.

OCT 6TH (SUN), 2019

Room: 517 Time: 11:20-11:40

Session 12: Editorial-in-Chief Meeting of JAMS, JoP, IMR and JAR

Chair : Myeong Soo Lee

Editorial-in-Chief Meeting of JAMS, JoP, IMR and JAR

Pan-Dong Ryu, South Korea: Chief Editor of Journal of Acupuncture and Meridian Studies(JAMS)
Hyun-Min Yoon, South Korea: Chief Editor of Journal of Pharmacopuncture(JoP)
Myeong Soo Lee, South Korea: Associate Editor of Integrative Medicine Research(IMR)
Ho Sueb Song, South Korea: Chief Editor of Journal of Acupuncture Research(JAR)

Room: 517 Time: 13:00-13:40

Session 13: Sasang Acupuncture Method *Chair : Jun Sang Yu*

Title: An Introduction to Taegeuk Acupuncture

Keywords: Korean medicine, Tae-Geuk acupuncture, Sa-sang typology, Epigastric tenderness, Hepatic dullness

Name: Jae-kyu Kim
Department: Department of Acupuncture & Moxibustion Medicine, Pusan National University Korean Medicine Hospital
Affiliation: Former Professor, Division of Clinical Medicine, School of Korean Medicine, Pusan National University
Country: South Korea

Biography: Mr. Kim Jae-kyu graduated in Korean Medicine from Kyung Hee University in 1978. He had his internship and residency in Kyung Hee University Korean Medicine hospital. He received his PhD degree in Korean Medicine from Kyung Hee University. He is a former professor of Korean Medicine (Department of Acupuncture & Moxibustion Medicine) at Kyung Hee Unversity and Pusan National University, School of Korean Medicine. He retired as Professor of Pusan National University in August 2019.

Abstract: Taegeuk acupuncture treatment which was suggested by Dr. Lee Byung-haeng for the first time in 1974, is based on Korean original Constitutional theory, Sasang Constitutional Medicine. In Dongeui-Susebowon, written by Dr. Lee Jema in 1894, he emphasized the function of heart by saying that heart is Taegeuk at the center among the five viscera organs(中央之太極) and rules the other four organs. The name Taegeuk acupuncture was originated from the importance of heart as Taegeuk in Dr. Lee Jema's theory.

Sasang Constitution means four types of constitution comprised of Tae-Yang, So-Yang, So-Eum and Tae-Eum. Tae-Yang has a characteristic of metal, So-Yang is fire, So-Eum is water, and Tae-Eum is wood. There are three main acupuncture points related to different charicteristics and dominant organ functions of each constitution. One is among Heart meridian five shu points, and it is used for reinforcing method to restrain the dominant characteristic of each constitution. Another point is yuan-source (primary) point on the weak organ's meridian for reinforcement. The other is yuan-source (primary) point on the strong organ's meridian for reduction. For instance, in case of Tae-Yang, by reinforcing HT8 which has a characteristic of fire among heart meridian five shu points, we can reduce excessive metal-dominant characteristic of Tae-Yang. Since Tae-Yang has a decreased function of liver system, we choose LR3 for reinforcement, and LU9 for reduction of an excessive function of lung system. Therefore, the three main acupuncture points for Tae-Yang consist of HT8(+), LR3(+), and LU9(-).

In a clinical practice, LI4, LI11 and ST36 are additionally chosen as representatives of acupoints on the upper and lower extremity. However, the treatment effects seem similar whether or not you choose the three additional points. Therefore, when you treat pediatric patients or patients who are afraid of needles, you can use only the three main points for the treatment.

Its clinical applications are psychogenic diseases (e.g. anxiety, depressive mood disorder, Hwa-byung, sleep disorder, etc.), autonomic nerve system disorders, poor blood circulation, chronic pain syndrome (e.g. fibromyalgia), chronic fatigue syndrome, and so on. It can be an effective treatment measure for refractory conditions which show poor response to conventional treatments and other acupuncture techniques. This is because, Taegeuk acupuncture helps patients' own natural healing process by restoring the balance of the human body, regardless of the locations or etiology of the illness.

When you have the patient who has one of those conditions listed above, the first thing you have to do is examining epigastric tenderness and hepatic dullness, to identify the patient's constitution before the practice of acupuncture. Correct classification of the constitution is the most important part of the treatment process. Dr. Lee Jema suggested the classification of the four constitutions based on the personality and external appearance. In addition to Dr. Lee Jema's theory, Dr. Lee Byung-haeng checked the response of the patient after treating one point among Heart meridian five shu points which restrains the dominant characteristic of assumed constitution. However, because sometimes the patient's personality, appearances, and response to acupoint needling are not typically fit into one specific constitution, it is not easy to identify one's constitution with those methods. As a solution, we can check epigastric tenderness and hepatic dullness sound before and after performing probable types of acupuncture on the patient. If you performed the correct type of acupuncture(your classification of the constitution was correct), epigastric tenderness and hepatic dullness get better after the treatment. Thus, epigastric tenderness and hepatic dullness can be diagnostic indices before the treatment as well as effect estimation indices during the course of treatment.

OCT 6TH (SUN), 2019

Room: 517 Time: 13:40-14:00

Session 13: Sasang Acupuncture Method *Chair : Jun Sang Yu*

Title: Acupuncture Treatments Based on Constitution Classification

Keywords: Taeguk Acupuncture, Constitutional acupuncture, Sasang constitutional medicine

Name: Prof. Byunghee Koh
Department: Dept. of Sasang Constitutional Medicine
Affiliation: College of Korean Medicine, Kyunghee University
Country: South Korea

Biography:

Education

2005.8 – 2019.2 Chief Professor, Dept. of Sasang Constitutional Medicine, College of Korean Medicine, Kyung-Hee University
1998.9 - 2000.8 Visiting Professor, University of Bridgeport, CT. U.S.A.
1993.3 - 2005.8 Director of Dept. of Sasang Constitutional Medicine, Kyung-Hee University Medical Center
1982.3 - Professor, Dept. of Constitutional Medicine, Kyung-Hee University Medical center
1983.9 - 1986.8 Kyung-Hee Graduate course of Oriental Medicine (Doctor)
1979.3 - 1981.2 Kyung-Hee Graduate course of Oriental Medicine (Master)
1973.3 - 1979.2 College of Oriental Medicine, Kyung-Hee University.

Academic Positions

2012.1 - Convener, ISO TC249/WG5 (TCM Terminology & Informatics)
2012.8 - Board Member, Society of Integrated Medicine

2012.8 - Vice chairman, Society of Special Committee of Constitutional Medicine, WFCMS (World Federation of Chinese Medicine Societies)
2008.2 - Editor-in-chief, Journal of Sasang Constitutional Medicine.
2004.3 – 2009.3 Director, International Studies of Oriental Medicine, Kyunghee Univ.
2000.10- 2003.10 President, Korea Institute of Oriental Medicine
1998.3 - 1998.8 Board Member, Society of Oriental Medicine
1996.4 - Board Member, Society of Sasang Constitutional Medicine
1994.11- 1997.2 Executive secretary, Institute of Oriental Med. Kyung-Hee University.
1994.4 - Honorary President, Society of Information in Oriental Medicine
1994.4 - 1996.4 President, Society of Sasang Constitutional Medicine
1992.9 - 1994.4 President, Society of Information in Oriental Medicine
1991.8 - Honorary Board Member, Liaoning Society of Chinese Medicine
1991.9 - 1993.3 Inspector, Association of Oriental Medicine, Kyung-Hee Univ.
1990.3 - 1994.3 Executive Secretary, Society of Sasang Constitutional Medicine
1985.3 - 1990.3 Administrative manager, Society of Sasang Constitutional Medicine

Abstract:

Objectives: After the development of Sasang constitutional theory by Dr. Lee Jema, there were several kinds of Acupuncture theory in Korea. In this topic we'd like to look over methods of each treatments to find out better solutions.

Methods: 1) Outline of each treatments
2) Try to find out the problems in their theory

Results: 1) There are some problems in their visceral concept application between meridian theory and Sasang constitutional theory.
2) In the case of constitutional acupuncture treatments of Dr. Kwon's and Dr. Yom's, they had to provide reasons of choosing different pulse positions as oppose to traditional pulse positions.
3) Differentiating standard for constitution classification based on pulse diagnosis is too subjective.

Conclusion: We have to try to find out better solutions to cover such problems.

OCT 6TH (SUN), 2019

Room: 517 Time: 14:00-14:20

Session 13: Sasang Acupuncture Method *Chair : Jun Sang Yu*

Title: A Study on Establishing the Sasang Constitution Acupuncture Method through Reviewing Research

Keywords: Sasang Acupuncture, Eight Constitution Acupuncture(8體質鍼), acupoint(穴位)

Name: Suzy Han
Department: Sasang Constitutional Medicine
Affiliation: College of Korean Medicine, Sangji Univ
Country: South Korea

Biography: Intern(2019):Traditional Korean Medicine Hospital of Sangji University, Wonju-si, Gangwon-do, Rep. of Korea
Author(2018):Review of experimental&clinical studies on Cheongsimyeonja-tang in Korea, J Sasang Constitut Med
Development of the Clinical Practice Guideline(2017):One of the development groups of Evidence-Based CPGs of Korean Medicine for prolonged/chronic fatigue

Abstract:

Objectives: Sasang Constitutional Medicine is uniquely established in the field of Korean Medicine and Eight Constitution Acupuncture which is created upon Sasang constitutional medicine is widely applied in clinics. However, there exist no established theory but hypotheses with regard to the composition of acupoints of constitution acupuncture. The purpose of this study was to compare the acupuncture method between Sasang Constitutional Medicine and Eight Constitution Medicine.

Methods: We reviewed a total of 11 studies found on various domestic Oriental medicine journals and 7 literature ect. with the key words of Sasang Acupuncture, Eight Constitution Acupuncture(8體質鍼), and acupoint(穴位).

Results: Among studies and literature chosen, the application of Saam's acupucture method was many. Eight Constitution Medicine method is applied in the various disease and clinical studies were increased after the year 2000.

Conclusion: Although there were vulnerable approached to its theoretical and clinical evidence, further study should be followed to establish proper method of constitutional acupuncture.

Room: 517 Time: 14:30-14:50

Session 14: Clinical Guideline *Chair: Myeong Soo Lee*

Title: Are Clinical Practice Guidelines Including Acupuncture in Your Country Appropriate and Valid?

Keywords: clinical practice guidelines, acupuncture, quality, appropriateness, validity

Name: Prof. Hitoshi Yamashita
Department: Graduate School of Health Sciences
Affiliation: Morinomiya University of Medical Sciences
Country: Japan

Biography: Hitoshi Yamashita is a Professor and Dean of Graduate School of Health Sciences, Morinomiya University of Medical Sciences, Osaka, Japan. He received his Ph.D. in Health Sciences at the University of Tokyo in 2002. His research area is safety management and clinical research methodology of acupuncture. He has 32-year experience of clinical practice in acupuncture clinics affiliated with universities and core public hospitals.
Hitoshi Yamashita serves as auditor of The Japan Society of Acupuncture and Moxibustion (JSAM), vice-president of The Society for Evidence-Based Integrative Medicine (eBIM), councilor of The Japan Society for Oriental Medicine (JSOM), editor-in-chief of "Japanese Journal of Integrative Medicine". He is also an editorial board member of "Integrative Medicine Research", "Complementary Therapies in Medicine", "The Journal of Korea CHUNA Manual Medicine for Spine & Nerves" and "Korean Journal of Acupuncture".

Abstract:

Objectives: To evaluate the quality and validity of clinical practice guidelines (CPGs) which include the strength of recommendation on acupuncture in Japan.

Methods: The relevant CPGs were searched and selected according to predefined criteria, and reviewed by three independent researchers in terms of methodology and correctness.

Results: As of July 2019 in Japan, there were 13 CPGs including statements on the strength of recommendation on acupuncture. Among them, 2 CPGs were in accordance with the GRADE system, and 9 were rated as 4 or less (7-point scale) in the overall ratings with AGREE II. Regarding consistency with predefined methods of formulating recommendations, acupuncture is underestimated in 3 CPGs (facial palsy, chronic headache and irritable bowel syndrome). Also, 2 CPGs (lateral humeral epicondylitis and interstitial cystitis) published in 2006 and 2007 were out-of-date. Recently published "Japanese Orthopaedic Association (JOA) Clinical Practice Guidelines on the Management of Low Back Pain 2019" included multiple issues of serious misinformation on acupuncture: the opposite and incorrect conclusions that acupuncture is not superior to the control group, due to errors in literature selection, data extraction and data input.

Conclusion: Overall, the quality of CPGs assessing acupuncture as a treatment option are not necessarily high in Japan, and some of the CPGs need to be revised. Validation of CPGs including information on acupuncture should be conducted periodically. Exchanging information among countries in this issue would be useful and encourage this continuous work.

OCT 6TH (SUN), 2019

Room: 517 Time: 14:50-15:10

Session 14: Clinical Guideline *Chair: Myeong Soo Lee*

Title: Development of Korean Medicine Clinical Guideline for Non-specific Chronic Low Back Pain

Keywords: Chronic Low Back Pain, Korean Medicine, Acupuncture, Clinical guideline

Name: Prof. Dongwoo Nam
Department: Department of Acupuncture & Moxibustion
Affiliation: College of Korean Medicine, Kyung Hee University
Country: South Korea

Biography: Associate Professor at Department of Acupuncture & Moxibustion, College of Korean Medicine, Kyung Hee University, Director of General Affairs and International Affairs – Society of Korean Oriental Medicine, Director of International Affairs – Korean Acupuncture & Moxibustion Medicine Society, Director of General Affairs – Korean Medicine Spine & Joint Society, Director of Research and Development – Spinal Manipulation Society

Abstract:

Purpose: As science and medicine evolves, the average life span of mankind is rapidly being extended. The growing population of the elderly and interest towards well-being is stimulating growth of the complementary medicine market. Acupuncture is one of the most popular treatments to the patients seeking complementary medicine. As patient population receiving acupuncture increases worldwide, needs for a standardized clinical guideline is growing. Among the many diseases treated by acupuncture, musculoskeletal disorders rank the top.
The objective of this study is to establish Korean Medicine clinical guideline for non-specific chronic low back pain.

Methods: A task force team to establish the guideline was composed. Literature review was done in order to search for evidence of safety and efficacy of acupuncture and other Korean Medicine treatments. A survey was done in order to find out how Korean medical doctors derive pattern identification for acupuncture and herbal prescriptions in treating non-specific chronic low back pain. Then, based on the results of literature review and survey, a conference meeting of experts was held. Through the Delphi method, a draft of the acupuncture clinical guideline for non-specific chronic low back pain was established. Now the review board, composed of experts of musculoskeletal disorders, public health, statistics, and representatives of patients are modifying the draft.

Results: Evidence of safety and efficacy of acupuncture treatment for musculoskeletal disorders was established. A standard or pattern identification was derived. A draft of Korean Medicine clinical guideline for non-specific chronic low back pain was established.

Conclusions: More rigorous, well designed and large scaled RCTs are in need to improve the quality and make modifications this clinical guideline.

Room: 517 Time: 15:10-15:30

Session 14: Clinical Guideline *Chair: Myeong Soo Lee*

Title: Strategic Integration of Traditional and Complementary and Integrative Medicine into Clinical Practice Guidelines

Keywords: Clinical practice guidelines traditional complementary medicine

Name: Dr. Susan Arentz
Department: Research Fellow
Affiliation: NICM Health Research Institute, Western Sydney University
Country: Australia

Biography: Dr Susan Arentz is a research fellow of NICM, editor and naturopathic clinician. Susan is an active researcher with high level academic output in areas of clinical practice guidelines, complementary medicine curriculum, integrative naturopathy and women's health. Susan has experience in clinical trials and health services research as a lead investigator of Systematic Reviews, clinical trials including RCTs and as a contributor to Clinical Practice Guidelines. As the Editor-in-Chief of the AJHNM, the highest ranked complementary medicine association journal in Australia, Susan facilitates peer review of a network of intra and inter disciplinary peer reviewers in the publication of a quarterly journal. Susan supervises HDR students and continues in private practice at a gynaecology and obstetrics clinic in Sydney Australia.

Abstract: Strengths of recommendations in clinical practice guidelines (CPGs) are informed by the quality of evidence of efficacy and safety, and transformed into decision making by balancing generalizability, availability, affordability, acceptability, direct and indirect costs and the values and preferences of patients, providers and policy makers. There is a paucity of evidence for many Traditional, Complementary and Integrative Medicine (TCIM) interventions and services, however their recognition in CPGs contributes to co-ordinated continuity of care across multiple healthcare settings and enhances evidence-based, person-centered clinical effectiveness and policy decisions. CPG development is a complex process that includes multidisciplinary panels of experts and stakeholder consultation. TCIM experts are required to articulate modifying factors and inform PICO questions, to accurately inform the inclusion of TCIM in CPGs. This scoping and evidence review informed the updated CPG: Deciding palliative and end of life care for people with diabetes.

Method: A two phased literature search included 1. a scoping review and 2. a rapid systematic review of evidence. Electronic databases and grey literature were systematically searched to clarify modifying factors and shortlist 20 TICMs of a rapid systematic review of efficacy.

Results: 209 studies clarified seven key modifying factors including patient preferences; routine use; safe TICMs for co-morbidities; simultaneous acting TCIMs; high quality evidence of effectiveness or ineffectiveness; risks and logistic feasibility. Evidence-based strong recommendations of the CPG included when to start or continue a TCIM intervention, refer to an appropriately qualified TCIM practitioner and when to stop a TCIM intervention or service.

Conclusion: Inclusion of TCIM in CPGs requires a systematic approach to the quality of evidence, balanced against patients' values, benefits and harms, available resources, feasibility of the intervention, acceptability by stakeholders and effect on health equity. Inclusion of TCIM in CPGs can provide succinct high-level recommendations that facilitate patient centred evidence-based care and accurately inform evidence-based policy.

OCT 6TH (SUN), 2019

Room: 517 Time: 15:30-15:50

Session 14: Clinical Guideline *Chair: Myeong Soo Lee*

Title: Korean Medicine Clinical Practice Guideline for Knee Pain

Keywords: Knee pain, Clinical Practice Guideline, Korean Medicine

Name: Dr. Wonsuk Sung
Department: Department of Acupuncture & Moxibustion
Affiliation: Dongguk University Bundang Oriental Hospital
Country: South Korea

Biography:
2012-2014 M.S. Department of Clinical Korean Medicine, Kyung Hee University
2014-2018 Ph.D. Department of Clinical Korean Medicine, Kyung Hee University
2018- Fellow. Dongguk University Bundang Oriental Hospital

Abstract:

Objectives: Knee pain is the illness that has ranked top in the medical cost and visit number in the Korean Medicine (KM) institutions. With the trend that the older aged population is increasing, it is predicted that people with knee pain is increasing resulting in the life quality degradation and the high social costs. In this situation, KM has strength in the clinical practice of knee pain. The purpose of Clinical Practice Guideline (CPG) was to enhance the reliability of KM by reinforcing the evidence with objective and rational verification, to develop a standardized clinical guideline, and to make a reasonable judgment in the treatment of knee pain.

Methods: We assembled committee with experts and established development plan. Committee set up key questions and searched relevant evidence comprehensively by using following databases: Pubmed, Ovid-EMBASE, Cochrane library, CNKI, OASIS, and NDSL. The evidence were reviewed according to the pre-defined selection/exclusion criteria, and the guideline draft was made by using the quality of evidence (4 levels: High, Moderate, Low, and Insufficient) and the grade of recommendation (5 grades: A, B, C, D, and GPP) based on the GRADE method. Official consensus was obtained through the following steps: 1) we used the Delphi method to reach agreement on the draft. 2) draft was further revised through external review and produced into the final guideline. 3) guideline obtained confirmation from relevant academic societies.

Results: We classified knee pain into 4 categories (knee osteoarthritis, knee rheumatoid arthritis, soft tissue injury, and other type) and made guideline according to several KM treatments (e.g. manual acupuncture, electroacupuncture, warm or fire needle acupuncture, moxibustion, herbal medicine, pharmacopuncture, acuputomy, cupping, and others). Among them, it was confirmed that pharmacopuncture had moderate evidence and B recommendation level (high considerable) on knee osteoarthritis. To complement the existing CPG published in 2017, we will expand KM treatments (e.g. physiotherapy, chuna, and manipulation therapy), focus on the disease name (e.g. knee osteoarthritis not knee pain), and create evidence through direct execution of randomized clinical trial.

Conclusion: CPG is expected to provide objectivity, rationality, and standard of KM treatment for knee pain by continuous research and supplementation.

Room: 517 Time: 16:00-16:20

Session 15: Clinical Research II *Chair : Jun-Hwan Lee*

Title: Case Study Projects by a Korean National Research Agency: Past 12 years and future

Keywords: Korean medicine, Case reports, Acupuncture, Observational study, Practice-based evidence

Name: Dr. Sungha Kim
Department: Clinical Research Division
Affiliation: Korea Institute of Oriental Medicine
Country: South Korea

Biography: Dr. Sungha Kim studied Korean Medicine at Wonkwang University, Iksan and graduated as MS in 2009. She then worked as a resident in Acupuncture and Moxibustion department at Wonkwang Korean Medicine Hospital. She received her PhD degree in 2018 at University of Science and Technology. She is a researcher at Korea Institute of Oriental Medicne and developed a passion for promoting case reports among clinics of Korean Medicine. She has presentations, papers, and posters to her credit.

Abstract:

Objectives: Scientific rigor is a known challenge to establish in heavily individualized practices of traditional medicine. A national research agency in Korea carried out a 12-year project to promote case reports among clinics of Korean Medicine (KM). This report aims at providing challenges, achievements, and thoughts for future endeavors.

Methods: We reviewed all the projects executed by the Korea Institute of Oriental Medicine between 2005 and 2017 promoting case reports in clinics of KM. The findings were categorized stage of project development, themes of project stage, achievement, and challenges.

Results: The implemented studies include eleven prospective- and five retrospective - case series, and one comparative trial. The project stages are divided into four, initial (surveying and building a database on Korean acupuncture), transitional (educating Korean Medicine doctors on writing case reports and building a case report system), stagnation (partially attributable to IRB's considering case report projects as clinical trial) and resurrection (building a rigorous evidence base from local clinics). The major challenges included practitioners' in clinics feeling burdened by the rigor of documentation requirement, the limited options of usable objective measurement tools available at general KM, and IRB's categorizing case report projects as clinical trials hence imposing unrealistic compliance burden.

Conclusions: Promoting case reports in local clinics, while being warranted to remain as a crucial research method to build evidence based KM practice, requires supports from stakeholders including motivated clinicians of KM, extended use of diagnostic device available at KM practice, and insightful and flexible regulatory bodies' decision making.

OCT 6TH (SUN), 2019

Room: 517 Time: 16:20-16:40

Session 15: Clinical Research II *Chair : Jun-Hwan Lee*

Title: Korean Traditional Medicine in Treating Patients with Mild Cognitive Impairment: A multicenter prospective observational case series

Keywords: Mild cognitive impairment, Cognitive Dysfunction, Korean traditional medicine, Herbal medicine, Acupuncture, Observational study

Name: Yu-Jin Choi
Department: Clinical Medicine Division
Affiliation: Korea Institute of Oriental Medicine
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Biography: Senior Researcher, Clinical Medicine Division, Korean Institute of Oriental Medicine (KIOM)
Korean Medicine Doctor, Specialist in Neuropsychiatry of Korean Medicine

Education: (May 2016 ~ Feb 2019) Department of Neuropsychiatry, Clinical Korean Medicine, Kyung Hee University Graduate School
(Mar 2009 ~ Feb 2015) College of Korean Medicine, Kyung Hee University

Research interest: Neuropsychiatry of Korean Medicine
Culture bound syndrome
Neurocognitive disorder
Hwa-byung (Anger syndrome)

Abstract:

Objectives: In Korea, patients with mild cognitive impairment can choose to receive treatment of Korean medicine, and Korean medicine hospitals are providing specialized medical care for preventing and managing cognitive disorders. The aim of the study is to explore the role of Korean medicine therapy for patients with mild cognitive impairment in real clinical setting.

Methods: Fifteen patients with mild cognitive impairment were enrolled in this prospective observational study in three Korean medicine hospitals. Korean medicine treatments were delivered by experienced professionals, and not restricted to standardized treatment. Outcome measures were prospectively planned to examine the Korean-Montreal Cognitive Assessment (K-MoCA), Korean-Mini Mental State Examination (K-MMSE), and other detailed neuropsychological assessment at the baseline, after 12 weeks and 24 weeks of the treatment.

Results: Korean medicine treatment for MCI treatment in real-world clinical setting included herbal medicine and acupuncture. Herbal medicine formulae used in this study were classified into three categories; tonifying-Qi (33.3%), tonifying-Kidney (46.7%), and calming-Liver (20%) formulae. The most frequently used herbs in herbal decoction were Acori Graminei Rhizoma, Polygalae Radix, and Poria Sclertum Cum Pini Radix. In the cognitive ability assessment, K-MoCA score significantly improved after the treatment (mean difference 2.6 [95% CI: 1.3 to 3.9], p=0.001). K-MMSE score slightly increased after the treatment, however the improvement was not statistically significant (mean difference 0.8 [95% CI: -0.5 to 2.0], p=0.195). In detailed neuropsychological assessment, cognitive domains of executive functions and memory were distinctively improved after the treatment.

Conclusions: In this prospective observational case series, we could see the real clinical environments of treating patients with mild cognitive impairment in Korean medicine hospitals. Patients treated with Korean medicine showed improved results in the neuropsychological assessment after the 12 and 24 weeks.

Room: 519
Time: 10:00-10:40

Session 16: Manipulation Methods
Chair : Gi-Young Yang

Title: Clinical Acupotomy Treatment

Keywords: Acupotomy, Wonli Acupuncture, Miniscalpel-Acupuncture

Name: Geon-Mok Lee
Department: Korean Medicine
Affiliation: Korean Acupotomy Medicine Society
Country: South Korea

Biography:
Hospital director, Lee-Geonmok Wonli Korean Hospital
2008. 8. ~ President, Korean Acupotomy Medicine Society
2007. ~ 2009. President, Korean Acupuncture & Moxibustion Medicine Society
1993. ~ 2009. Professor, College of Korean Medicine, Wonkwang University
Degree of Bachelor in Korean Medicine, Wonkwang University, Feb 1987
Degree of Master in Korean Medicine, Wonkwang University, Feb 1990
Degree of Doctor in Korean Medicine, Wonkwang University, Aug 1993

Abstract: The treatment mechanism of Acupotomy was classified into 5 categories. First, Pain relief and restoration of the motor function after soft tissue relaxation and decompression by acupotomy. Second, relief of tissue and clearing nerves through incision. Third, removal of pathological tissue through bleeding stimulation, induction of regeneration. Fourth, the effect of anti-inflammation through regeneration and recovery of tissue. Fifth, the unique analgesic effects of acupuncture. In addition, acupotomy was superior to the needling, lidocaine, steroid, and hyaluronic acid injections in musculoskeletal pain.

OCT 6TH (SUN), 2019

Room: 519
Time: 10:40-11:20

Session 16: Manipulation Methods
Chair : Gi-Young Yang

Title: Acupotomy Treatment of Patients with Ossification of Posterior Longitudinal Ligament by RSN Acupuncture

Keywords: RSN Acupuncture, Acupotomy, OPLL, HIVD

Name: Myung-Seok Ryu
Department: Korean Medicine
Affiliation: President of the Korean Medical Institute of Soft Tissue
Country: South Korea

Biography: Ryu Myung-Seok is a Korean Medicine Doctor and Director of Daemyung Korean Medical Clinic in seoul. Also He graduated from Korean Medicine from Wonkwang University. He has been president of the Korean Medical Institute of Soft Tissue since June 2012. In 2016, he was invited by the American Intergrative Medical Institute (AIMI) in Los Angeles to teach Ryu's Soft tissue & nerve(RSN) Acupuncture treatment for musculoskeletal disorders.
Invited lecture in Los Angeles in 2017
Invited lecture in Los Angeles, San Francisco and Vancouver in 2018
RSN Acupuncture lectures for doctors in the UK, Australia, Poland, Russia, and USA in October 2018 in Korea
RSN Acupuncture lectures for doctors in Moscow, Russia, September 2019

Abstract: Ossification of Posterior Longitudinal Ligament (OPLL) is a symptom that neuropathy occurs through the spinal canal due to thickening of the posterior ligament to maintain the movement of the spine behind the vertebral vertebrae. Since it was first reported by Tsukimoto in Japan in 1960, it has been known as a disease that occurs mainly in Asians, but recent studies have reported an increasing frequency in the West. OPLL is diagnosed by radiographic examination such as CT or MRI. Surgical treatment is mainly performed due to features such as finger numbness, hypoesthesia, and muscle weakness. In this situation, I report a case of improvement of symptoms with Acupotomy treatment and Herbal medicine treatment for OPLL patients.

Room: 519 Time: 11:20-12:00

Session 16: Manipulation Methods

Chair : Gi-Young Yang

Title: Chuna Technique of Scoliosis and Variation of Upper Cervical Vertebra due to TMJ Disorder

Keywords: Chuna, TMJ, Upper Cervical Vertebra, Scoliosis

Name: Seon-Hee Lee
Department: Director
Affiliation: The Society of Spine & Joint in Korean Medicine
Country: South Korea

Biography:
1988.11~ Director, K.M.D, Sun Kyung Korean Medicine Clinic
1998~ Auditor, Gangnam-gu Korean Medical Society
2009~ Director, The Society of Spine & Joint in Korean Medicine
Degree of Bachelor in Korean Medicine, Kyunghee University, Feb 1985
Degree of Master in Korean Medicine, Sangji University, Feb 1996
Degree of Doctor in Korean Medicine, Daejeon University, Feb 2000

Abstract: Masticatory movement biased to one side causes variation of temporal bone. The variation of the temporal bone leads to the distortion of sphenobasilar junction, which in turn causes tension of dura mater, leading to systemic spine variation. Since these variations are compensatory in the body, this suggests a perspective in which scoliosis can occur.

OCT 6TH (SUN), 2019

Room: 519 Time: 13:00-13:30

Session 17: Various Chuna Techniques

Chair : Yong-Hyeon Baek

Title: Chuna Therapy on Facial Nerve Palsy

Keywords: facial chuna, facial palsy

Name: Jae Soo Kim
Department: Acupuncture & Moxibustion Medicine
Affiliation: Korean Acupuncture & Moxibustion Medicine society
Country: South Korea

Biography: Kim Jae-soo is a professor of Korean Medicine(Department of Acupuncture & Moxibustion Medicine) at Daegu hanny Unversity. Also he is serving a director of 'Facial palsy center' and 'Clinical trial center' in Daegu Hanny unversity hosipital.
He graduated from Korean Medicine from Kyung Hee University. He had his internship and residency in Kyung Hee University Korean Medicine hospital. He received his PhD degree in Korean Medicine from Kyung Hee University.

Abstract: This presentation proposes facial chuna manual therapy(FCMT) guideline applied from current manual therapy techniques. We searched manual therapies for facial palsy including cervical chuna manual therapy(CCMT), temporomandibular joint chuna manual therapy(TMJCMT), proprioceptive neuromuscular facilitation(PNF), neuromuscular re-education(NMR), facial exercise(FE), mime therapy(MT) in several databases. The CCMT and TMJCMT release nerve compression, helping blood circulation and nerve conduction. PNF using irradiation, bilateral activation, and eccentric facilitation improves muscle power and symmetry. NMR, as a retraining tool of facial movement pattern, enhances neuromuscular feedback. FE helps the patient to move and massage facial muscle themselves continuously. MT aims to develop a conscious connection between the use of certain muscles and facial expressions. FCMT on peripheral FNP can stimulate the proprioceptive neuromuscular receptor in the face. Peripheral FNP has four phases; progress phase, plateau phase, recovery phase, sequelae phase. Each phase needs different treatment which includes relaxation, resistance, origin-insertion extension, and nerve pathway expansion.

Room: 519 Time: 13:30-14:00

Session 17: Various Chuna Techniques *Chair : Yong-Hyeon Baek*

Title: Frequent Chuna Techniques of Lumbar Spine and Pelvic Girdle

Keywords: Chuna, Lumbar spine, Pelvic girdle

Name: Hyun-Jong Lee
Department: Department of Acupuncture and Moxibustion medicine
Affiliation: College of Korean Medicine, Daegu Haany University
Country: South Korea

Biography: Lee Hyun-Jong graduated from Kyung Hee University in 2000. I trained at the Korean Medicine Hospital of Kyung Hee University. Since 2007, I have worked for Jaseng Korean Medicine Hospital for 5 years. I am a professor at Daegu Haany University since 2012. I have conducted research on thread embedding acupuncture for musculoskeletal disorder since 2015.

Abstract: Chuna therapy is a manipulation treatment to recover the balance in orthopedic structure and function. Chuna includes techniques such as thrust, mobilization, distraction of the spine and joints, soft tissue release, visceral manipulation, craniosacral therapy, and the diaplasis technique. Korean Chuna therapy has developed over time by combining the advantages of Tuina from China, Shiatsu from Japan, and chiropractic from the United States. Chuna has recently been applied to national health insurance. A lot of Korean medical doctors have begun to pay attention to the chuna. In this iSAMS 2019, I would like to explain the Chuna techniques used frequently to the lumbar spine and pelvis.

OCT 6TH (SUN), 2019

Room: 519 Time: 14:00-14:30

Session 17: Various Chuna Techniques *Chair : Yong-Hyeon Baek*

Title: Frequent Chuna Techniques of Cervical and Thoracic Spine

Keywords: Chuna, Cervical spine, Thoracic spine

Name: Eun-Seok Kim
Department: Acupuncture & Moxibustion Medicine
Affiliation: Korean Acupuncture & Moxibustion Medicine Society
Country: South Korea

Biography:
2018. 4.~ Assistant professor, K.M.D, College of Korean Medicine, Daejeon University
Degree of Bachelor in Korean Medicine, Kyunghee University, Feb 2011
Degree of Master in Korean Medicine, Kyunghee University, Feb 2014
Degree of Doctor in Korean Medicine, Kyunghee University, Aug 2018

Abstract: Chuna therapy is a manipulation treatment to recover the balance in orthopedic structure and function. Chuna includes techniques such as thrust, mobilization, distraction of the spine and joints, soft tissue release, visceral manipulation, craniosacral therapy, and the diaplasis technique. Korean Chuna therapy has developed over time by combining the advantages of Tuina from China, Shiatsu from Japan, and chiropractic from the United States. Chuna has recently been applied to national health insurance. A lot of Korean medical doctors have begun to pay attention to the chuna. In this iSAMS 2019, I would like to explain the Chuna techniques used frequently to the cervical and thoracic spine.

Room: 519
Time: 14:40-15:00

Session 18: Various Acupuncture
Chair : Sang-Hoon Lee

Title: Exploring Acupoint Selection Patterns for Pain Control: Data mining of randomised controlled clinical trials

Keywords: acupoint; acupuncture; data mining; neuromodulation; pain; systematic review

Name: Yechae Hwang
Department: Cognitive Medical Science lab
Affiliation: Kyunghee University
Country: South Korea

Biography: K.M.D. Student, College of Korean Medicine, KyungHee University
Research Assistant of Acupuncture and Meridian Science Research Center, KyungHee University
Interested in Acupuncture and Meridian, neuroscience, data mining and Statistics

Abstract:

Background and Purpose: The underlying principles of acupoint selection for pain control are complex. Analysis of acupuncture treatments from clinical studies may provide us with a potential rule when selecting an acupoint to control pain. The aim of the present study was to investigate which acupoints were most commonly used to treat pain in randomized controlled clinical trials (RCTs).

Methods: We searched acupuncture treatment regimens in RCTs included in the Cochrane Database of Systematic Reviews for pain management. We analyzed acupoint information (more than ten RCTs included) from seven eligible systematic reviews on pain control. The frequency of the acupoints used was calculated and visualized on a human body template.

Results: The main acupoints commonly used across many diseases were SP6, ST36, LI4, and LR3. However, the most frequently used acupoints varied across many different conditions. For example, the most frequently used acupoints to treat migraine were GB20, LR3, GV20, EX-HN5, LI4, and TE5, while the most frequently used acupoints for managing dysmenorrhoea were SP6, CV4, SP8, LR3, and BL32. Both regional and distal acupoints were used for pain management with acupuncture.

Conclusion: Our findings reveal that both local and segmental/extra-segmental neuromodulation are the most common frequent phenomena for pain control in acupuncture research. Analysis of acupoint information through a data-driven approach will unveil the hidden rules of acupoint selection in clinical practice

OCT 6TH (SUN), 2019

Room: 519
Time: 15:00-15:20

Session 18: Various Acupuncture
Chair : Sang-Hoon Lee

Title: Kiiko Matsumoto's Clinical Strategies

Keywords: Hara, Kiiko Matsumoto, KMS, Palpation, Nagano

Name: Dr. Julie Lim Greif Ph.D
Department: none
Affiliation: none
Country: United States

Biography: Dr Julie Lim Greif received her Bachelor's Degree in Art from Ehwa Women's University and completed a Diploma in Computer Music from Seoul National University, South Korea. In 2003, she earned Master of Science in Oriental Medicine and Acupuncture from SAMRA University, Los Angeles, CA. She earned Ph.D. in Oriental Medicine from the American Liberty University.
She has been studying and practicing Kiiko Matsumoto Style Acupuncture (KMS) since 2004 refining her skills in Japan and across the United States with Kiiko Sensei herself as well as other prominent Japanese Masters from Japan. She is a teacher of KMS for South Korea. She continues to expand her knowledge by studying and researching Kiiko Matsumoto Style Acupuncture, Acupuncture Oncology, M-test Sports Acupuncture, Sa-am Acupuncture, and Sa-Sang Constitutional medicine.
Dr. Lim Greif's specialty includes pain management, infertility, auto immune disease, cancer related treatment, addictions, mental illness include anxiety & depression. She is working closely with the USC athletic teams and professional players especially the football.
Currently, she practices in Redondo beach, Palos Verdes and Los Angeles. She is the Vice President of the Association of Korean Asian Medicine and Acupuncture of California.

Abstract: Kiiko Matsumoto's style of acupuncture (KMS) is a synthesis of the approaches of many prominent Japanese acupuncturists along with her own clinical findings and ideas. She has studied closely with Dr. Nagano, Master Manaka and Master Kawai. In addition, Sansei Kiiko has integrated Chinese acupuncture classics such as Nan Ching, Su Wen and Ling Shu. The characteristic of KMS is the very close relationship between the various medical theories and the human body as obtained by palpation and verification of acupuncture points. These acupuncture points are chosen only if they have a positive effect on the body.
KMS focuses on constitutional treatments and there are eleven major categories which are (1) blood stagnation in the Hara (Oketsu) in the head and in the vertebral artery, (2) imbalanced immune system, (3) stomach Qi deficiency, (4) birth trauma, shock and trauma or navel imbalance, (5) systemic detoxification, (6) autonomic nerve imbalance, (7) blood pressure imbalance and cardiac problems, (8) hormonal imbalance, (9) scar tissue disturbance, (10) structural imbalance and (11) vascular compression of the neck, vertebral artery and thigh. KMS focuses on the underlying problems that have led to a specific clinical presentation or that block the natural healing capabilities of the body. By doing so, the body is helped in its recovery process and can facilitate a deeper, more complete healing. KMS integrates palpation as a diagnostic and treatment technique.
Lastly, constitutional treatment are implemented that is combined with specific treatments but care is taken that not too many needles are inserted at once. The treatments are based on palpable findings based on application of pressure on areas of the body to determine the presence or absence of discomfort, clinical presentation and the medical history of the patient. Hence, KMS yields better, longer lasting and more reliable results for the care of patients.

Room: 519 Time: 15:20-16:00

Session 18: Various Acupuncture *Chair : Sang-Hoon Lee*

Title: Practice of Nagano Method Acupuncture Treatment

Keywords: Nagano diagnosis, Natural healing power, Whole Treatment, Immediate effect, Reproducibility, Five-field treatment methods

Name: Koji Nagano
Department: Representative of Nagano Method Clinical Study Society
Affiliation: Nagano Method Clinical Study Society
Country: Japan

Biography:

1956 Born in Oita
1980 Graduated from Tokyo Medical College
1998 Started to publish cases in idononippon
1998 Launched Nagano Method Clinical Study Society and expanded nationwide
2011 Lecture and practical skills as one of the lectures at the Japanese Culture and Traditional Medicine Conferences in Frankfurt Germany
2015 Published a Well-understand Nagano Method Acupuncture Treatment from idononippon
2016 Nagano Method Treatment seminar held in Munich
2016 Lecture and practical skills as one of the Japanese groups at the WFAS Tokyo Convention
2018 Well-understand Nagano Method Acupuncture Treatmentpublished by Korean publisher
2019 Nagano Method Treatment seminar in Bad Namheim,Germany,at an international seminar organized by DAGFA

Abstract: Nagano Method Treatment will look for factors that inhibit natural healing. There is a Unique diagnostic method for that. The treatment is given based on this diagnosis.
We will approach this treatment from five field. The immune system, vascular system,
Autonomic neuroendocrine system, muscle system, and qi system

OCT 6TH (SUN), 2019

Room: 519 Time: 16:00-16:30

Session 18: Various Acupuncture *Chair : Sang-Hoon Lee*

Title: Acupuncture for Patients with Traumatic Multiple Rib Fractures: a single-centre experience

Keywords: acupuncture, trauma, pain, recovery, Korean medicine

Name: Prof. Kun Hyung Kim
Department: Department of Clinical Medicine
Affiliation: School of Korean Medicine, Pusan National University
Country: South Korea

Biography: Kun Hyung Kim (KMD, PhD) is an Associate Professor at the Department of Clinical Medicine, School of Korean Medicine, Pusan National University. He received his degree of BSc, MSc and PhD in Korean Medicine in Kyung Hee University. He worked as a senior researcher at Korea Institute of Oriental Medicine (KIOM) in 2008 to 2011, and as a research fellow at the Australasian Cochrane Centre in 2011. He has been working for Pusan National University since 2013. He is an editorial board member of Journal of Acupuncture Research and European Journal of Integrative Medicine. His main research topic includes evidence synthesis of clinical studies of acupuncture, clinical investigation of role of acupuncture for pain management in various clinical settings, integrative approach for patients after traumatic events, and inpatient/long-term post-discharge care of patients after surgery.

Abstract:

Objectives: This presentation aims to illustrate the current use of acupuncture for patients with traumatic rib fractures and discuss its potential role in the trauma-care setting.

Methods: Clinical observation of patients with traumatic multiple rib fractures referred from the regional Level 1 trauma centre at an academic tertiary hospital for acute postoperative pain management and chronic pain will be narratively summarised. Supporting evidence from the previous available literatures will be discussed. Details of acupuncture treatments will be reported as revised Standards for Reporting Interventions in Clinical Trials of Acupuncture (STRICTA). Ongoing collaborative research by the Korean medicine doctors, trauma surgeons and trauma-care nurses will be briefly introduced.

Results: Details of findings will be presented at the conference.

Conclusion: Integrative care for patients with traumatic multiple rib fractures is urgently needed. Our observations and ongoing researches may provide meaningful clue for the role of acupuncture in the consorted efforts to improve patients after traumatic events. Further rigorous research on the effectiveness and safety of acupuncture in the traumacare setting is warranted.

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Hierarchical Micro/Nano-Porous Acupuncture Needles Offering Enhanced Therapeutic Properties

Keywords: Acupunture; Anodization; Micro/nano-scale structure; High surface area

Name: Monica Claire Flores
Department: Energy Science and Engineering
Affiliation: Daegu Gyeongbuk Institute of Science & Technology (DGIST)
Country: South Korea

Biography: I graduated with a Bachelor's degree in Mechanical Engineering from Saint Louis University. And now, I am pursuing a Master's degree in the Energy Science and Engineering department of DGIST. I aim to develop my skills and expertise through a hands-on experience within a university that embraces creativity, divergence and innovation.

Abstract: Acupuncture as a therapeutic intervention has been widely used for treatment of many pathophysiological disorders. For achieving improved therapeutic effects, relatively thick acupuncture needles have been frequently used in clinical practice with, in turn, enhanced stimulation intensity. However, due to the discomforting nature of the larger-diameter acupuncture needles, there is considerable interest in developing advanced acupuncture therapeutical techniques that provide more comfort with improved efficacy. So motivated, we have developed a new class of acupuncture needles, porous acupuncture needles (PANs) with hierarchical micro/nano-scale conical pores upon the surface, fabricated via a simple and well known electrochemical process, with surface area approximately 20 times greater than conventional acupuncture needles. The performance of these high-surface-area
PANs is evaluated by monitoring the electrophysiological and behavioral responses from the in vivo stimulation of Shenmen (HT7) points in Wistar rats, showing PANs to be more effective in controlling electrophysiological and behavioral responses than conventional acupuncture needles. Comparative analysis of cocaine induced locomotor activity using PANs and thick acupuncture needles shows enhanced performance of PANs with significantly less pain sensation. Our work offers a unique pathway for achieving a comfortable and improved acupuncture therapeutic effect.

OCT 5TH (SAT), 2019

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Acupuncture for Poststroke Shoulder Pain: A Systematic Review and Meta-Analysis

Keywords: stroke, acupuncture, shoulder pain, review

Name: Dr. Sung Min Lim
Department: Clinical Research on Rehabilitation
Affiliation: Senior researcher, National Rehabilitation Center
Country: South Korea

Biography: Sung Min Lim, KMD, is a senior researcher of Korean National Rehabilitation Center since 2010. He is interested in traditional medical theory and specialized in stroke rehabilitation and pain control.

Abstract:

Objectives: The aim of the present study was to summarize and evaluate evidence for the effectiveness of acupuncture in relieving poststroke shoulder pain.

Methods: Five databases were searched without language restrictions. All randomized controlled trials that evaluated the effects of acupuncture for poststroke shoulder pain compared with controls were included. Assessments were performed primarily with the Visual Analogue Scale (VAS), Fugl-Meyer Assessment (FMA), and effective rates.

Results: In all, 201 potentially relevant articles were identified; 12 were randomized controlled trials that met our inclusion criteria. Meta-analysis showed that acupuncture combined with rehabilitation treatment appeared to be more effective than rehabilitation treatment alone for poststroke shoulder pain, as assessed by VAS (weighted mean difference, 1.87; 95% confidence interval [CI], 1.20-2.54; <0.001); FMA (weighted mean difference, 8.70; 95% CI, 6.58-10.82; $P < 0.001$); and effective rate (RR, 1.31; 95% CI, 1.18-1.47; $P < 0.001$).

Conclusion: Our results suggest that acupuncture may be effective for treating shoulder pain after stroke. However, further studies with more subjects and a rigorous study design are needed to confirm the role of acupuncture in the treatment of poststroke shoulder pain.

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Enhanced Therapeutic Treatment of Colorectal Cancer Using Surface-Modified Nanoporous Acupuncture Needles

Keywords: Acupuncture; Nanoporous structure; Colorectal cancer (CRC) treatment

Name: Hong Soo Kim
Department: Energy Science & Engineering
Affiliation: Daegu Gyeongbuk Institute of Science & Technology (DGIST)
Country: South Korea

Biography: I graduated from Pusan National University with a double major in Chemical Engineering & Nano Energy Engineering (March 2013 - Aug 2017). Currently, I'm admitted to the Daegu Gyeongbuk Institute of Science & Technology (DGIST) in September 2017 as an integrated course in energy engineering.
My main research interests are surface modification of materials and electrochemical research. The surface modification of the material is intended to improve the specific surface area and the physical & chemical properties by applying anodization and deposition on the surface of the material. In addition, various surface analysis and electrochemical experiments were performed to analyze changes in surface modification.

Abstract: Acupuncture originated within the auspices of Oriental medicine, and today is used as an alternative method for treating various diseases and symptoms. The physiological mechanisms of acupuncture appear to involve the release of endogenous opiates and neurotransmitters, with the signals mediating through electrical stimulation of the central nervous system (CNS). Earlier we reported a nanoporous stainless steel acupuncture needle with enhanced therapeutic properties, evaluated by electrophysiological and behavioral responses in Sprague-Dawley (SD) rats. Herein, we investigate molecular changes in colorectal cancer (CRC) rats by acupuncture treatment using the nanoporous needles. Treatment at acupoint HT7 is found most effective at reducing average tumor size, β-catenin expression levels, and the number of aberrant crypt foci in the colon endothelium. Surface modification of acupuncture needles further enhances the therapeutic effects of acupuncture treatment in CRC rats.

OCT 5TH (SAT), 2019

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Scolopendra Pharmacopuncture Combined with Electroacupuncture for the Treatment of Ganglion Cysts: A retrospective study

Keywords: Scolopendra pharmacopuncture; Electroacupuncture; Ganglion cysts; Retrospective studies

Name: Prof. Minseop Shin
Department: Department of Acupuncture Medicine, Wonkwang University
Affiliation: Shin Min Seop Korean Medicine Clinic
Country: South Korea

Biography:
KMD/ PH D.
Adjunct Professor
Wonkwang University, College of Korean Medicine I Department of Acupuncture Medicine

Abstract:

Introduction: Ganglion cysts require a sustainable treatment that suppresses their frequent recurrence. This study aimed to explore the clinical effects of Scolopendra pharmacopuncture (SP) and electroacupuncture on ganglion cysts.

Methods: We retrospectively reviewed the patient records and follow-up reports for 20 patients with wrist ganglion cysts who received SP and electroacupuncture from April 2016 to March 2017. The cyst diameter, recurrence, visual analog scale (VAS) scores for pain, the Korean version of the disabilities of arm, shoulder and hand (K-DASH) score, and the Korean version of the patient-rated wrist evaluation (K-PRWE) score before and after treatment were noted.

Results: After treatment, the cyst diameter decreased significantly from 13.61 ± 6.41 mm to 4.86 ± 6.01 mm ($p < 0.001$), and VAS score for pain decreased from 1.47 ± 1.77 to 0.55 ± 0.53 ($p = 0.020$). Further, the K-DASH score decreased significantly from 8.47 ± 12.46 to 2.08 ± 7.18 ($p = 0.016$), and score for the function subscale of K-PRWE decreased from 11.28 ± 4.34 to 9.16 ± 3.55 ($p = 0.046$). The recurrence rate was 17.64%. We did not observe any complication related to SP or electroacupuncture, except mild rash, itching, and swelling at the injection site in four patients.

Conclusions: Combination of SP and electroacupuncture may be effective in treating ganglion cysts; further prospective studies with large population are needed to clarify the effect of SP and electroacupuncture.

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Selective Attention to Cupping Therapy on the Body: An eye tracking study

Keywords: Selective attention, cupping therapy, eye tracking

Name: Minyoung Hong
Department: Acupuncture and Meridian Science Research Center, College of Korean Medicine
Affiliation: Kyung Hee University
Country: South Korea

Biography:

Minyoung Hong Researcher
Cognitive Medical Science Lab
Acupuncture and Meridian Science Research Center
Kyung Hee University, Seoul, Korea

Younbyoung Chae Associate Professor
Cognitive Medical Science Lab
Acupuncture and Meridian Science Research Center
Kyung Hee University, Seoul, Korea

Abstract:

Objectives: Despite the many medical benefits, cupping therapy makes it difficult for some patients to access treatment due to unpleasant marks on the skin. It can also lead to negative reactions after treatment. In this study, we aimed to investigate whether or not pain-related stimuli with cupping on the back and the face induce negative emotions and attentional bias towards to these stimuli using the method of eye-tracking.

Methods: Fifty (24 females) pain-free volunteers were presented with four different kinds of visual stimulations (the back with or without cupping and the face with or without cupping). Both images of cupping and the control images (without cupping) were presented on one screen at the same time. While participants watched the pictures, their eye movements were recorded. After the eye tracking task, they also evaluated unpleasantness level to each image.

Results: The fixation time percentage was longer in response to cupping on the body than control image (both in the back and in the face). The attentional bias to cupping images were greater in the back region compared to the face region. In addition, both cupping on the back and on the face showed more unpleasant than the control images.

Conclusions: Eye tracking study and psychophysical analysis showed that negative emotional states and attentional bias to cupping therapy-related painful stimuli were prominent both in the back and in the face. Our findings suggest that vigilance for pain-associated stimuli might reflect an adaptive reaction to potential harmful stimuli.

OCT 5TH (SAT), 2019

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Minimisation of Variations in Locating an Acupuncture Point Using a Laser-Device

Keywords: acupoint, acupoint location, laser device

Name: Dha-Hyun Choi
Department: Korean Medical Science
Affiliation: Kyung Hee University
Country: South Korea

Biography: MS student, KMD, Department of Korean Medical Science, Graduate school, Kyung Hee University

Abstract:

Objectives: Accurate location of an acupoint has been considered an essential component in clinical practice. A laser device can provide us with a visual guide for locating acupoints by dividing the space equally between two landmarks on the body. This study was performed to compare the accuracy between the naked-eye and a laser device to locate an acupoint.

Methods: Participants were asked to mark acupoint PC5 on a male volunteer's arm using two different methods: without a laser device (naked-eye) and with a laser device. The distributions of the acupoints were further estimated by the kernel density estimation methods.

Results: The overall distribution of acupoints was less when the laser device method was used, compared to the naked-eye method. There were significant differences in the longitudinal axis between the two methods, but no significant differences in the horizontal axis.

Conclusions: Our findings suggest that direct measurement of the acupoint location using a laser device can minimize variations in locating points. Acupuncture teachers need to identify the most efficient point location methods for implementation in training and practice. Laser-assisted tools will help practitioners locate the acupoints more accurately and should be considered as standard practice, especially in acupuncture research and education.

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Effects of Carthami Semen Pharmacopuncture Combined with Electroacupuncture on Carpal Tunnel Syndrome: A Retrospective Chart Review

Keywords: Carpal tunnel syndrome, Carthami Semen pharmacopuncture, electroacupuncture, numbness, VAS, chart review

Name: Pyung-wha Kim
Department: Clinical Medicine Division, Clinical Research Coordinating Team
Affiliation: Korea Institute of Oriental Medicine
Country: South Korea

Biography: Pyung-Wha Kim, KMD, is a senior researcher of Clinical Medicine Division at Korea Institute of Oriental Medicine, Deajeon, and a specialist in Korean Medicine Obstetrics and Gynecology. She earned her Bachelor of Korean Medicine at Wonkwang University, Iksan, and her Master of Korean Medicine at Woosuk University, Jeonju, and completed her residency training at Woosuk University Medical Center.

Abstract:

Objectives: Carpal tunnel syndrome (CTS) is the most common entrapment neuropathy at the wrist, resulting in substantial physical, psychological and economic loss; but there is no gold standard therapy for CTS. The aim of this study was to evaluate the clinical effects of Carthami Semen Pharmacopuncture (CSP) combined with electroacupuncture (EA) on CTS through a retrospective analysis.

Methods: A retrospective analysis was carried out using outpatients' charts for CTS, who received CSP and EA at Shin Min-Seop Korean Medicine Clinic from August 2017 to September 2018. Primary outcome was visual analog scale (VAS) score for numbness and tingling. Secondary outcomes were VAS score for pain, Korean version of Boston carpal tunnel questionnaire (K-BCTQ) score and changes in nocturnal pain, Tinel sign and Phalen test.

Results: Among 24 outpatients, there were 14 patients who met the criteria. After treatment, the VAS score for numbness and tingling decreased significantly from 58.00 ± 20.10 to 10.79 ± 11.31 ($p < 0.001$). Further, VAS score for pain decreased from 50.29 ± 17.48 to 9.14 ± 8.37 ($p < 0.001$), K-BCTQ symptom score decreased from 2.36 ± 0.62 to 1.72 ± 0.60 ($p=0.002$). We did not observe any severe complication related to CSP or EA.

Conclusion: Combination of CSP and EA may be effective in treating CTS; further prospective studies with large population and intensive observations of adverse effects are needed.

OCT 5TH (SAT), 2019

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: The Apoptotic Effects of Cultivated Wild Ginseng Pharmacopuncture in Breast Cancer Cells

Keywords: breast cancer, cultivated wild ginseng, apoptosis

Name: Jungeun Kim
Department: Korean Medicine R&D Team 1
Affiliation: National Development Institute of Korean Medicine
Country: South Korea

Biography: -

Abstract:

Objectives: Breast cancer is a worldwide health problem causing morbidity and mortality. Cultivated wild ginseng, an oriental medicine has many health benefits and may exhibit direct anti-cancer properties. In this study, we investigated whether cultivated wild ginseng pharmacopuncture(CWG pharmacopuncture) enhances apoptosis by triggering reactive oxygen species production in breast cancer cells.

Methods: The human breast cancer cells(MCF-7) were used for DCF-DA or DHE assay to evaluate the production of active oxygen. Cell cycle arrest and Annexin V binding were measured by flow cytometry. In order to define the mechanical basis of apoptosis, western blotting and mitochondrial membrane potential transition analysis were performed. In vivo, CWG pharmacopuncture was administered IV three times a week after injecting MCF-7 cells into 6-week-old mice mammary glands.

Results: CWG pharmacopuncture treatment increased the ROS generations in a dose-dependent manner in MCF-7 cells. Furthermore, it induced the changes in the mitochondrial membrane potential as well as the expression of apoptosis-related proteins, the DNA fragmentation, and the cytochrome C release into the cytosol. These in vitro findings of CWG pharmacopuncture were further supported by confirming the reduction of tumor growth after treatment with CWG pharmacopuncture in the MCF-7 xenograft mouse model.

Conclusion: The results of this study revealed that CWG pharmacopuncture may inhibit breast cancer cell growth by activation of the apoptotic pathway.

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Study on the Validity of Surface Electromyography as Assessment Tools for Facial Nerve Palsy

Keywords: surface electromyography (sEMG), facial nerve palsy, nerve conduction study (NCS), house-brackmann grade, yanagihara unweighted grading scale, sunny-brook facial grading system

Name: Prof. Taehan Yook
Department: Department of Acupuncture & Moxibustion Medicine,
Affiliation: College of Korean Medicine, Woosuk University
Country: South Korea

Biography:
Representative of Medical Association of Pharmacopuncture Institute (MAPI) & Korean Pharmacopuncture Institute (KPI)

Abstract:

Objectives: The purpose of this study was to find out validity of Surface Electromyography(sEMG) compared with Nerve Conduction Study and clinical assessment scale as assessment factors for facial palsy.

Methods: We investigated 50 cases of patients with pe-ripheral facial palsy who had records of sEMG and NCS to check. Then we analyzed the correlation between sEMG and NCS that carried out around 1 week after onset. And we analyzed the correlation between sEMG and clinical assessment scales that were measured three times around 1 week, 3-4 weeks and 5-6 weeks after on-set. Clinical assessment scales used in this study were House-brackmann grade, Yanagihara unweighted grad-ing scale and Sunnybrook facial grading system. We used Pearson's correlation for statistical analysis.

Results: sEMG and NCS, measured at similar times, were statistically correlated. Especially, the correla-tion with the forehead region was high. And sEMG and clinical assessment scale, measured at same time, were statistically correlated, especially after 5 weeks from onset.

Conclusion: According to this study, sEMG is expect-ed to be useful to assessment facial palsy.

OCT 5TH (SAT), 2019

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Antioxidant Effect of Extracts from Rosa Multiflora by Supercritical Fluid Extraction for Pharmacopuncture

Keywords: Rosa multiflora, supercritical fluid extraction, pharmacopuncture

Name: Byeong-Mun Kwak
Department: Meridian and Acupoint
Affiliation: College of Korean Medicine, Semyung University
Country: South Korea

Biography: My major is cosmetic science, graduated from Ajou University. After graduate, now I doing research at college of Korean Medicine, Semyung University for fusing medicine and cosmetics as a post-doctoral course. During the course of degree, I studied lipids mainly using supercritical technology. I studied various natural products through research on cosmetic materials and now interested in researching oriental medicine, cosmetics, and biomaterials through herbal natural products based on the research. I think that the supercritical technology that my mainly skills while researching at the college of Korean medicine can be fuse into Korean medicine, bio, food, and cosmetics.

Abstract:

Background and Purpose: Rosa multiflora is known to be effective in edema, abscess, and sclerosis in oriental medicine, and it is known to woundhealing and to be effective in skin diseases. Extract from rosa multiflora has been studied for pain relief, anti-inflammation, antibacterial and antioxidant. In this study, we tried to extract the oil from Rosa multiflora by analyzing fatty acids and evaluate the effects of antioxidants and anti-aging by using the supercritical fluid extraction method, which is rather than the conventional solvent extraction method, to prove the possibility of using as a new substance for pharmacopuncture.

Methods: Rosa multiflora was extracted by supercritical fluid extraction and the extracted extract was analyzed for fatty acids by gas chromatography. Antioxidant effects through beta carotene bleaching assay and anti-inflammatory effects were evaluated using RAW 264.7 cells, and proteins related to collagen synthesis, MMPs, ECM-cell interaction, cytokines, and antioxidant enzyme were analyzed by 2-D electrophoresis.

Results: The supercritical extraction yield of Rosa multiflora was about 4%, and the fatty acid analysis for the extract was analyzed 54% Linoleic acid, 24% Oleic acid, and 12% Linolic acid. The antioxidant, anti-aging effect proved by beta carotene bleaching assay was about 75%. In 2D PAGE analysis, 15 proteins change were analyzed in five mechanisms: collagen, MMPs, ECM-cell interaction, cytokines, an antioxidant enzyme.

Conclusion: Rosa multiflora extract using a natural extraction method which is supercritical fluid extraction showed more than half composition of the linoleic acid in fatty acid analysing. Other studies have already shown that this linoleic acid is effective in antioxidate. And in the 2D-PAGE analysis of protein changed, Rosa multiflora extract is confirmed to effective in antioxidant, anti-aging. In conclusion, Rosa multiflora extracts using supercritical fluid extraction through safety assessment of additional toxicity, as materials for pharmacopuncture, microneedle therapy system(MTS) it proved the possibility of using as anti-oxidation and anti-aging substances.

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: Development of Zombie Acupuncture, Extracting Needling Component from Acupuncture Treatment

Keywords: Zombie acupuncture, acupuncture, needling credibility, needling component of acupuncture

Name: Prof. Kyungmo Park
Department: Department of Biomedical Engineering
Affiliation: Kyung Hee University
Country: South Korea

Biography: The lab (NIM, Neuroimaging and Integrative Medicine) of presenters try to understand the neural mechanism of the integrative medical interventions including acupuncture, qigong, meditation and self-healing using fMRI. the lab established in 1999 when Prof. Kyungmo Park joined the faculty member of biomedical engineering department, Kyung Hee university, Korea.
While the lab performs neuroimaging experiments with healthy subjects as well as various clinical conditions including low back pain, facial palsy, cognitive impairment, and functional dyspepsia etc., They intend to investigate the physiological interaction between mind and body. Also they are trying to exploring the self-regulation on neuro-physiological states using real-time fMRI neurofeedback technique. He strongly believes that there's ways for human being to go beyond our evolutionary determinism.

Authors: Kyungmo Park, Sunjung Lee, Yoobin Bae, Minsung Kang

Abstract:

Motivation: A number of large clinical trials have reported that real acupuncture(REAL) does not significantly outperform sham acupuncture, while not many experimental studies of acupuncture have reported the deferential underlying mechanisms of the specific component which is the somatosensory stimulation by acupuncture needle and the non-specific components which are various treatment contexts including patient's anticipation of treatment effect.
In our previous studies, we dissociated the contextual and attentional aspects of acupuncture from the specific acupuncture component by using a novel form of placebo acupuncture (phantom acupuncture, PHNT), which reproduces the acupuncture needling ritual without somatosensory tactile stimulation and manipulates the patients needling credibility. We found that the PHNT has different underlying mechanisms for the clinical effect of low back pain compared to the real acupuncture.
However, while we succeeded to identify a cognitive/affective component by needling credibility and consequent anticipation of clinical effects, we couldn't identify the pure effect of somatosensory stimulation (needling component) when no other components and also the interaction between two components, needling component vs cognitive/affective component. In this study, we devised an experimental intervention (zombie acupuncture, ZOMBIE) which keeps original acupuncture needling but not any therapeutic cognitive/affective aspects. And we compared the four different interventional conditions.

Methods: The protocol of our study was submitted and approved by the Institutional Review Board (ethics committee) of Kyung Hee University (KHGIRB-19-151). As of AUG 30th, 2019, Sixty Six healthy young adults (22.02±1.93 years-old) were randomized into four groups, REAL, PHNT, ZOMBIE, or CONT. All the participants lying on bed were visually blocked from their lower limbs where the intervention would be placed. While REAL and PHNT groups were informed to get the electro-acupuncture, a treatment procedure, ZOMBIE group was informed to take a diagnostic procedure, nerve conduction study. REAL and ZOMBIE actually got the electro-acupuncture stimulation. PHNT didn't get any tactile somatosensory stimulation including needling and elctro-stimulation while the acupuncturist verbally emulated needling procedure and electro-stimlulation. (Lee 2014, and Makary 2018 for detailed information).
To visually guide the stimulation for enhancing the cognitive/affective aspect in PHNT and ZOMBIE, for all the groups, red cross (stimulation time) and black cross (no stimulation) sign were alternated synchronized with the three second electro-stimulation time (implemented by Psychtoolbox and Matlab, The MathWorks Inc., MA, USA) and the actually stimulation were simultaneously relayed to the participants in REAL and ZOMBIE groups. CONT group watched the visual guidance of stimulation with the clear instruction that they would simply lie on bed.
For REAL and ZOMBIE, acupuncture needles (sterilized stainless steel, 0.3*30 mm, DongBang Acupuncture, South Korea) were inserted at two acupoints (ST36 and GB39) in the left lower leg by an experienced acupuncturist (KP). The needles were then manipulated briefly to induce acupuncture sensation. Electro-acupuncture (EA) was then applied to the needles using a constant-current stimulator (ITO, ES-160, Japan). Prior to the EA stimulation session, the electrical current intensity for EA stimulation was set slightly below individual's electrical pain threshold (i.e., moderate but not painful stimulation). EA stimulation was applied at 16 Hz. For EA stimulation, 20 discrete blocks of EA stimuli were applied (stimulation duration = 3 sec, pseudo randomized Inter-stimulation Interval = 12, 14, 16, and 18 sec, total length =5mins).
Quantitative sensory testing (QST) (VDT, PPT, MDT, and MPT) were performed before and after EA to evaluate pain and sensory threshold change by different interventions of four groups. Also, there were 5 minutes resting period (PRE/POST) before and after the stimulation period. To investigate any autonomic modulation specific to somatosensory afference or needling credibility following acupuncture, we recorded heart rate (HR) and skin conductance (SC) throughout the entire session (XX min). After entire session, participants were presented with a 10-point VAS and were asked to rate the intensity of different sensations they felt during the EA stimulation period. We used an in-house Korean version of MGH Acupuncture Sensation Scale comprising different ''acupuncture sensation(AC)'' (i.e. aching, soreness, pressure, heaviness, fullness, warmth, cool, numbness, tingling, and dull pain). In order to quantify the total intensity of acupuncture sensation experienced, we used the previously described MASS-Index. This index attempts to balance breadth and depth of sensations as well as the number of different sensations chosen by the subject. Using a questionnaire and interview after experiment, we retrospectively evaluated participants' blindness. (whether they believed they received the interventions which they were informed to be given.)

Results and discussion: The PHNT aimed to create a 'cognitive/affective component (needling credibility)' but without somatosensory afference(needle stimulation). In turn, the ZOMBIE aimed to implement 'the needle stimulation' but without the needling credibility. The REAL included both of the components and the CONT doesn't at all.
As of AUG 30th 2019, for ZOMBIE and PHNT groups, 15 of seventeen (88%) and 18 of twenty(90%) participants were blinded respectively, while REAL(fifteen participants) and CONT(fourteen participants) groups didn't have unblinded participant. Acupuncture sensation and QST data will be open when the experiment finishes and will be presented in the conference.

Conclusions: We found the participants, in zombie acupuncture group, successively didn't have any acupuncture needling credibility, even though they experienced the real electro-acupuncture intervention. This experimental acupuncture intervention (ZOMBIE) could be utilized for investigating the pure effect of needling stimulation excluding acupuncture-related cognitive/affective aspect.

REFERENCES: 1. Makary MM et al. Phantom acupuncture induces placebo credibility and vicarious sensations: a parallel fMRI study of low back pain patients. Sci Rep. 2018;8(1):930.
2. Lee, J. et al. Phantom acupuncture: Dissociating somatosensory and cognitive/affective components of acupuncture stimulation with a novel form of placebo acupuncture. PLoS One 9 (2014).

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OCT 5TH (SAT), 2019

Room: 519
Poster Presentation

Time: 12:30-13:30
Chair: Tae Han Yook

Title: A Study on Clinical Correlation between Quantitative Ultrasonography and Existing Measurement System for Facial Nerve Paralysis: A Pilot Study

Keywords: Ultrasonography, Facial nerve paralysis, Facial palsy, Peripheral nerve visualization

Name: Prof. Yoo-min Choi
Department: Dept. of Acupuncture and Moxibustion Medicine
Affiliation: Woosuk University Medical Center
Country: South Korea

Biography: Prof. Yoo-min Choi is a Korean Medicine Doctor and a specialist of Acupuncture and Moxibustion medicine, authorized by Ministry of Health and Welfare of Korean Government. She finished her residency course at Woosuk University Medical Center. Her academic interest is pathophysiology of peripheral nerve system especially regeneration treatment using acupuncture and Korean medicine. Now she is an assistant professor at college of Korean Medicine of Woosuk University.

Abstract:

Objectives: Superficial ultrasonography is a useful diagnostic device detecting pathological change of superficial anatomic structures like muscles, peripheral nerves, ligaments and tendons. This article is a multi-directional pilot study to investigate the quantitative application of ultrasonography for facial nerve paralysis.

Methods: Three visual grading systems-House-Brackmann scale, Yanagihara scale, Sunny-brook scale- and two quantitative measurements-Surface electromyography, ultrasonography- were conducted to six patients who have been diagnosed as a peripheral facial palsy more than six months. Especially, ultrasonography (HS50 Ultrasound system, Samsung Medison Co., LTD, Seoul) was used to measure the depth and cross-sectional area (CSA) of Zygomaticus Major muscle (ZMM) and the thickness of facial nerve (FN). All variables were statistically analyzed with Spearman's rank correlation test using SPSS ver. 22.0 for windows. All results were described as rs and p-value (CI 95%).

Results: As a verification of internal variables using ultrasonography, there was very strong correlation between CSA of ZMM and thickness of FN ($rs=0.899$, $p=0.014<0.05$). There was statistically significant and very strong correlations between total score of Yanagihara scale and CSA of ZMM ($rs=0.886$, $p=0.019<0.05$). Lastly, there was moderate correlation between asymmetric ratio of surface electromyography of ZMM and ultrasonographic CSA of ZMM ($rs=0.657$, $p=0.156>0.05$).

Conclusion: The results indicate that ultrasonography would have diagnostic value as a quantitative measuring device for facial nerve paralysis. For clinical use, further research providing standard reference data is needed.

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The Journal of Acupuncture Research (JAR), founded in 1983, is the official international journal of the Korean Acupuncture & Moxibustion Medicine Society. Manuscripts undergo stringent peer review; those accepted for publication are published open access. JAR is published quarterly in February, May, August, and November.

The journal, by providing a platform for dissemination and discussion, aims to strengthen the scientific understanding of the safety and effectiveness (efficacy) of acupuncture and related therapies in integrative medicine as well as in traditional medicine.

There is a long history of research on acupuncture. Work that takes into account historical empirical evidence, incorporating a broad evidence-based approach to acupuncture, and that is of interest and relevance to those involved in the practice, research, and education of acupuncture-based therapies in health care would be welcome.

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