SPECIAL CONFERENCE EDITION

The American Acupuncturist

AAAOM's Official Publication

for Practitioners of Oriental Medicine

AAAOM CONFERENCE 2011

Whole Medicine:
Teaming Up for Our Patients

May 12 - 15, 2011

Baltimore, Maryland

AAAOM 全美中醫公會

UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

AOMI American Oriental Medicine Institute

Co-Sponsored by

The American Association of Acupuncture and Oriental Medicine and
The Center for Integrative Medicine, University of Maryland Medical School

Supported by

The American Oriental Medicine Institute

AAAOM 全美中醫公會

Spring 2011
Volume 55

Kan Herb COMPANY

Made in the USA

At Kan, we have always believed the best way to ensure the consistency, quality, and safety of our products is to manufacture them ourselves. Kan buys herbs in whole raw bulk and tests each incoming lot for over 200 different pesticides as well as toxic metals and bio-burdens, such as yeast, mold, Staphylococcus, E.Coli and Salmonella. Our Certificates of Analysis reflect our commitment to the quality, safety and efficacy of our products.

Kan Herbals | Kan Traditionals | Kan Singles | Sage Solutions | Gentle Warriors | Chinese Modular Solutions | MycoHerb | Alembic Herbals

Chinese Herbal Products You Can Trust

We Have Moved!
380 Encinal Street, Santa Cruz, CA 95060
800.543.5233 831.438.9450 www.kanherb.com

Our Distributors in the U.S.

ACU-MARKET℠ CRANE HERB COMPANY EMERSON ECOLOGICS

GOLDEN NEEDLE Lhasa OMS Natural Partners Inc.

AAAOM
全美中醫公會

The American Acupuncturist is published quarterly by the American Association of Acupuncture & Oriental Medicine (AAAOM)
P.O. Box 162340, Sacramento, CA 95816
Tel: 916-443-4770 Fax: 916-443-4766
Toll Free: 866-455-7999
www.aaaomonline.org

ISSN: 1520-7714

Spring 2011
Volume 55

In this issue...

OM CLINICAL MEDICINE

The American Acupuncturist is published quarterly, providing a professional venue for articles on clinical research, translated works, legislative issues, education developments, commentaries, critical reviews, and other current topics of importance to AOM. We value your AOM perspective. Please consider submitting your article for potential publication in *The American Acupuncturist*. Submit to the AAAOM through our online submissions system.

AAAAOM IS "GOING GREEN"! You will continue to receive your print version of the journal as a member benefit. Also, you can read *The American Acupuncturist* online at our website. If you would like to be notified when the online version is available, please update your member profile at the website, www.aaaomonline.org, or call the AAAOM office at 866-455-7999.

Message from the President

Jeannie Kang, MSTOM, DNBAO, DNBIM, LAc

Dear Colleagues,

As I gaze out of my window on a beautiful Sunday morning, I am looking back on the last eleven months of this AAAOM administration. We have put the AAAOM through a transformation by integrating and implementing the systems we promised to put in place. The 2011 AAAOM Annual Report elaborates on the considerable work AAAOM has achieved in a very short period of time for the membership and for the AOM profession—all the stakeholders who share a common interest in a successful profession. This is AAAOM's first annual report, and we are very proud of the robust efforts the report clearly shows.

Where do we go from here? Onward and upward. It is not only time for the leadership to deliver on promises, but also time for the membership to step up and join us to realize the AAAOM's fullest potential! We now have systems in place to provide a useful website, and we have a past president's council, task forces, and committees in operation. House-cleaning may not be flashy, but it is essential to our goals.

Of course we cannot carry out our mission without increasing and strengthening our membership, invigorating our relationships with our business partners, and holding a compelling and meaningful international conference in Baltimore, Maryland, in May. Please join us at "Whole Medicine: Teaming Up for Our Patients" for what promises to be our most successful conference yet. Of value to your practice, AAAOM has established a new research arm of the conference to include and expand our research knowledge base along side our clinical presentations. Conference Scientific Review Chair Lixing Lao, PhD, LAc has facilitated the receipt and review of over 250 abstracts from all over the world. We hope you attend and see for yourself just how the AAAOM has invested in this educational and bonding experience between leaders, students, practitioners, and international speakers. This one is not to be missed!

Meanwhile, you have asked for tangible benefits to accompany our ongoing professional work. We have sought and received a "more bang for the buck" product that we believe AAAOM members will appreciate and find more engaging than ever. AAAOM members now have a new software system to better manage your membership, giving you capacities similar to Facebook. New tools include: personal profiles with the ability to list details about your practice or give you the chance to contact your colleagues; state association websites where state legislation and state-specific matters can be discussed or tracked; records that automatically track your conference participation and CEU credits and forums; bulletins boards and job boards to find or post opportunities. The AAAOM Board of Directors wants to make it easy for all stakeholders to connect with one another, with the public, and with trends influencing your practice and the profession. Welcome to the new AAAOM. We are building it for you.

It has been both an amazing experience and journey to serve as your president at this juncture in AAAOM history. I have learned so much about the inner operations of a very complex and comprehensive national organization. I have learned how much attention to detail goes into making a great organization. It is the hard-earned work—the blood and sweat of this volunteer board—that has made this possible, and I cannot thank them enough for their time, effort and sacrifice. I am very proud of both the team in place now and the way we have shared the workload through tough times for the sake of a stronger foundation for AOM. I think our past president Deborah Lincoln put it best: "As AAAOM's immediate past president and senior board member, building on the previous boards' mentorship, I feel compelled to acknowledge and compliment the AAAOM leadership and board. You have come together without ego involvement as a well-oiled working team during the reorganization of AAAOM for the benefit of our members and the working relationship with our sister boards."

If I have not publicly done so before, I want to thank our hard-working staff, Rene Walder and Jason Helmar for their dedication and commitment to AAAOM and to this profession. It is so clear to me that every bit of the collective *qi* is at work here, and I very much appreciate that collaborative energy.

Yours in Health,

Jeannie Kang, MSTOM, DNBAO, DNBIM, LAc
President, AAAOM Board of Directors

THE TEAVOLUTION OF WATER

Five authentically brewed
ZERO CALORIE UNSWEETENED
teas, blended with the goodness
of natural botanicals.

So light, so refreshing,
SO-KEN-BI-CHA.
water + tea + botanicals

FIND US ON
sokenbicha.com

Message from the President Translated by Kyung Shin

친애 하는 동료 여러분,

아름다운 일요 일 아침 창 밖을 내다 보며, 저는 지난 11 개월 간의 행정 업무를 뒤 돌아 보게 되었 습니다. 우리가 도입 하기로 약속 한 방식 들의 통합과 이행을 통해 우리는 AAAOM을 전환 하였습니다. 2011년 AAAOM 연례 보고서는 우리의 회원과 AOM 동료들, 즉 성공적인 전문직 수행에 관해 공동 관심사를 갖고 있는, 모든 주주들을 위하여 아주 짧은 시간 동안에 AAAOM이이룩한 큰 성과에 대해 자세히 설명하고 있습니다. 이것은 AAAOM의 첫 번째 연 례 보고서 이며 우리는 그 보고서가 명백하게 보여 주는 굉장한 노력에 아주 자랑 스럽습니다.

이제 우리는 여기서 어디로 가야 할까요? 앞으로 그리고 위로 전진 해야 합니다. 지금은 지도자 들이 약속 사항들을 이행 해야 할 때 일 뿐만 아니라, 한 발 더 나아 가서 AAAOM회원 들이 AAAOM이 갖고 있는 최대의 가능성을 현실화 하기 위해 우리와 하나가 되어야 할 때 입니다. 우리는 이제 유용한 웹 사이트를 제공 할 수 있는 방식을 도입 하고 전임 회장의 고문단과 특수 업무부와 위원회를 가동 하고 있습니다. 잡다한 일은 화려하진 않지만 우리의 목표 달성을 위해서는 필수 불 가결 한 것 입니다.

우리 회원의 증가와 강화는 물론 이고, 우리와 우리의 사업 동반자들 과의 관계의 활성화, 그리고 오는 5월 베릴린드의 볼티모어 에서 있을 흥미 롭고 의미 있는 국제 회의의 개최 없이 이 업무를 수행 할 수는 없습니다. AAAOM 건립 사상 가장 성공적인 협의회의가 될 것으로 기대 되는 "Whole Medicine: Teaming Up for Our Patients" 회의에 합류 해 주십시요. AAAOM은 우리의 임상 발표와 함께 우리의 연구 지식 기초를 포함하고 확장하기 위한 협의회의 새로운 연구 기관을 확립 하였 으니, 이것은 여러 분에게 가치가 있는 일 입니다. 협의 위원회는 전 세계로 부터 250 이상의 적요서를 받았 습니다. AAAOM이 지도자와 학생들, 전문인들 및 국제 강연인들 사이의 이런 교육 적이고 유래 결속적인 체험에 어떻게 투자 해 왔는 지, 여러분 들이 그 회의에 참석 하여 직접 눈으로 보시기를 바랍니다. 이 기회를 놓치지 마십시요.

한편 여러분 들은 우리의 계속적인 전문적 업무에 수반 하는 실질적인 이로움에 대해 문의 하였읍니다. 우리는 AAAOM 회원들이 이해 하고 지금 까지 보다 더욱 많은 참여를 하게 될 것으로 믿어 지는 "보다 나은" 산물을 찾아 헤매었고 그것을 얻었 습니다. AAAOM회원 들은 이제Facebook과 비슷한 능력을 여러분께 수여 하는, 여러 분의 회원권을 더 잘 관리 할 수 있게 하는 새로운 소프트 웨어 시스템을 갖게 되었 습니다. 이 새로운 시스템은 다음과 같은 것 들 입니다: 여러 분의 업무에 대한 자세한 내용의 열거나 여러 분의 동료 들과 연락 할 기회를 줄 수 있는 능력을 가진 개인의 인물 소개, 주 정부의 법규와 특정 사안들을 논의 하거나 지켜 볼 수 있는 주 정부 연합 웹사이트, 여러 분의 협의회 참석과 CEU 신용 및 공개 토론 등을 자동 적으로 추적 하는 기록들, 일 자리를 구하거나 공고 할 게시판 및 직업 게시판 등등 입니다. AAAOM 이사회는 모든 주주 들이 다른 회원이나 대중, 그리고 여러 분의 업무와 전문직에 영향을 주는 추세들과 쉽게 연결 될 수 있기를 원하고 있습니다. 새로운 AAAOM 가입을 환영 합니다. 우리는 여러분 들을 위해AAAOM을 설립하고 있습니다.

AAAOM 역사의 이 시기에 여러 분의 대표 이사로서 봉사 하는 것은 아주 뜻 깊은 경험 이며 여정 이었 습니다. 저는 아주 복잡하고 포괄적인 국내 조직의 내부 운영에 대해 아주 많은 것을 배웠습니다. 저는 세부 사항에 대한 얼마나 많은 배려가 거대한 조직을 만들어 내는 지를 배웠 습니다. 이런 일을 가능 하게 한 것은 자원 봉사 위원회의 피 와 땀으로 하여 힘들게 얻어진 성과 이며, 그들의 시간과 노력 그리고 희생에 대한 감사는 말로써 다 표현을 할 수가 없습니다. 저는 현재 우리의 팀에 배치 되어 있는그들에 대해, 그리고 AOM의 기초 강화를 위해 어려운 시기를 통해 작업 업무를 함께 나누어 온 방식에 대해 아주 자랑 스럽습니다. 저는 우리의 전 이사 Deborah Lincoln이 그 것에 대해 가장 적합 하게 말 했다고 생각 합니다. 그녀는 "AAAOM의 바로 전임 이사이며 선임 이사회 회원 으로써 이전의 이사회 회원권에 기초 하여, 저는 AAAOM지도부와 이사회에 경의와 찬사를 하지 않을 수 없습니다. 회원들의 이익과 자매 이사회들 과의 좋은 관계를 위한 AAAOM의 재 조직 과정 동안 여러분 들은 개인의 이기심의 개입 없이호흠이 잘 맞는 팀 으로 함께 일 해 왔습니다. 라고 말 했습니다. 제가 지금 까지 공식적으로 말씀 드리지 않았다면, 노고가 많으신 우리의 직원 분들, Doug Newton, Rene Walder, and Jason Helmar께 AAAOM과 이 전문직 업무에 대한 그들의 헌신과 참여에 대해 감사를 드리고 싶습니다. 이 일에 있어 모든 이의 기가 여기에 있음을 저는 확실 하게 느끼며, 그 합쳐진 힘에 아주 많은 감사를 드립니다.

여러분 들께 건강이 함께 하기를 바라며,

Jeannie Kang, MSTOM, DNBAO, DNBIM, LAc
(AAAOM) 이사회 대표

RESOURCE DIRECTORY

AAAOM—American Association of Acupuncture & Oriental Medicine

P. O. Box 162340
Sacramento, CA 95816
phone 916-443-4770
toll free 866-455-7999
fax 916-443-4766
email info@aaaomonline.org
www.aaaomonline.org

ACAOM—Accreditation Commission for Acupuncture and Oriental Medicine

Maryland Trade Center #3
7501 Greenway Center Drive
Suite 760
Greenbelt, MD 20770
phone 301-313-0855
fax 301-313-0912
www.acaom.org

CCAOM—Council of Colleges of Acupuncture and Oriental Medicine

600 Wyndhurst Avenue, Ste. 112
Baltimore, MD 21210
phone 410-464-6040
fax 410-464-6042
www.ccaom.org

FAOMRA—Federation of Acupuncture and Oriental Medicine Regulatory Agencies

4201 Patterson Avenue
Baltimore, MD 21215
phone 410-764-4766
800-530-2481
email contact@faomra.com
www.faomra.org

NCCAOM—National Certification Commission of Acupuncture and Oriental Medicine

76 South Laura Street, Suite 1290
Jacksonville, FL 32202
phone: 904-598-1005
fax 904-598-5001
email info@nccaom.org
www.nccaom.org

SAR—Society for Acupuncture Research

825 South 8th St, Suite 1106
Minneapolis, MN 55404
www.acupunctureresearch.org

From the Editor

From May 12 through 15, 2011, the AAAOM will hold its annual conference, "Whole Medicine: Teaming Up for Our Patients," which will be co-sponsored by the University of Maryland School of Medicine, Center for Integrative Medicine, Baltimore, Maryland, the American Association of Acupuncture and Oriental Medicine (AAAOM) and the American Oriental Medicine Institute (AOMI). This is the first time the AAAOM has held its annual conference jointly with a major medical school to discuss issues of best care for our patients. In this issue, AAAOM Conference Planning Chair Jennifer A. M. Stone, LAc has done two inspiring and informative interviews with the conference co-chairs, AAAOM President Jeannie Kang and Dr. Brian Berman, director of the Center for Integrative Medicine, on their roles in their respective organizations and their insights on this historical meeting. We also present 57 abstracts, submitted as part of the conference proceeding. These abstracts, many of them not previously published, will be presented both orally and in posters.

In this issue we present two acupuncture research-related articles. In "Acupuncture Practitioner: At the Interface of Patient and Research," Dr. Richard Hammerschlag, PhD, former co-president of the Society for Acupuncture Research (SAR) and emeritus dean of research, Oregon College of Oriental Medicine, Portland, Oregon, discusses the importance of acupuncture practitioners' participation in and understanding of the language of acupuncture research. Based on his long career in acupuncture research, he provides useful methods for familiarizing oneself with acupuncture research and offers insights on the future of acupuncture research. "Characteristics and Correlations between Human and Pet Use of Acupuncture: A Cross-Sectional Survey of Four Clinics," by Ella Woods, DAOM and her colleagues, reports their interesting survey on the use of acupuncture by pet owners and their pets. Part 2 of Professor Sherman Cohn's historical review, "Acupuncture, 1965-85: Birth of a New Organized Profession in the United States" further discusses the development of AOM in this country.

We also have two book reviews. Julie Chambers, LAc reviews *A Clinician's Guide to Using Granule Extract*, by Eric Brand, LAc. The review provides a useful summary of granule extract dosing in Chinese herbal medicine prescriptions. The second review, contributed by William R. Morris, PhD, DAOM, LAc on *What Is Medicine? Western and Eastern Approaches to Healing* by Paul U. Unschuld is a good summary of the key elements of the book, and I hope you will find the information useful.

It is my privilege and pleasure to have been editor-in-chief of *The American Acupuncturist* for the past two years. I am happy to have served the AOM community, but it is time to move on, and this will be the last issue in which I serve in this capacity. I thank all the staff, particularly Ms Lynn Eder, for their professionalism and hard work, and I also want to thank all the authors who have contributed to the journal and shared their experiences and expertise with our readers. Finally, I would like to encourage our readers to submit their articles on diverse topics and various styles of acupuncture practice. With your help I am sure that the quality of the journal will continue to improve in the coming years.

Sincerely yours,

Lixing Lao, PhD, LAc
Editor-in-Chief

CORRECTION:

Bonnie Povolny, LAc is currently a doctoral student at the Oregon College of Oriental Medicine. It was stated in her bio, Vol. 54, p. 32, that she has already received this degree.

AAAOM
全美中醫公會

The American Association of Acupuncture & Oriental Medicine, established in 1981, is a professional organization representing practitioners of Oriental medicine.

OUR MISSION

To promote excellence and integrity in the professional practice of acupuncture and Oriental medicine, in order to enhance public health and well-being.

OUR PURPOSES

To serve as the official representative and spokesperson for the professional acupuncturist and Oriental medicine practitioner in the United States.

To establish, maintain and advance the professional field of Oriental medicine, with acupuncture and other modalities, as a distinct, primary care (ability to exercise professional judgment within the scope of practice) field of medicine.

To integrate acupuncture and Oriental medicine into mainstream health care in the United States.

To advance the science, art and philosophy of acupuncture and Oriental medicine.

To protect the body of knowledge acupuncture and Oriental medicine.

To advance the professional welfare of our members.

To educate legislators, regulators, health care interests and the public regarding acupuncture and Oriental medicine.

To develop and maintain standards of ethics, education and professional competence, and to promote research and inter-professional relationships, nationally and internationally.

To insure that the public receives high quality AOM services.

To educate the public.

To serve the public effectively through improving access to our services.

2011 AAAOM Board of Directors

Executive Committee

Jeannie Kang, MSTOM, DNBAO, DNBIM, LAc
President
jeannie@goodki.com

Michael Jabbour, CSP, MS, LAc
Vice President
michael.jabbour@gmail.com

Deborah Lincoln, RN, MSN, RAc, NCCAOM
Immediate Past President
lincolndeborah@gmail.com

Janet Borges, MSTCM, DiplAc/CH, LAc
Secretary
janetlb44@yahoo.com

Kimberley Benjamin, LAc
Treasurer
soundacupunture@gmail.com

Directors at Large

Mark Evans, BS, LAc
mark@evansacupuncture.com

Jessica M.S. Gregory, MSAOM, LAc, Dipl OM NCCAOM
jessica@chcaa.com

Ann Wang, LAc
ann@treasureofeast.com

CAC Representative

Irwin Tjiong, LAc, MBA
hitjiong@gmail.com

Student Organization President

Public Directors

Richard Charles Niemtzow, MD, PhD, MPH
n5ev@aol.com

Mori West
mori@acuclaims.com

Interview: Brian Berman, MD

Jennifer A. M. Stone, LAc interviews Dr. Brian Berman, director of the Center for Integrative Medicine and professor of family and community medicine at the University of Maryland School of Medicine. Dr. Berman is co-chair of "Whole Medicine: Teaming Up for Our Patients," which will be held May 12-15, 2011, in Baltimore, MD.

Brian Berman, MD

JS: Dr. Berman, when did you originally become interested in acupuncture and alternative medicine therapies as an MD, and what ignited this interest?

BB: I became interested in acupuncture and alternative therapies in the late '70s and early '80s. I had excellent training in acute care, trauma center, and emergency room problems such as acute myocardial infarction. But when I encountered everyday problems in my practice, I was frustrated that I didn't have all the answers, particularly for chronic diseases such as chronic pain. I started to look for other answers to best help my patients. There wasn't a fellowship for alternative medicine so I started looking around the country to see what was going on at that time.

JS: What did you find in your search?

BB: Over time I realized that we were using an acute care model for all of our healthcare problems, including all the chronic diseases. We were using tools of drugs and surgery that worked very well for these acute care problems, but they were failing to deal with this rising tide of chronic disease. There was really nothing in my training, even as a family physician, to deal adequately with that.

I spent a year at the ARE clinic in Phoenix, Arizona, a holistic medical clinic connected with the Edgar Cayce Foundation. But I realized there really wasn't that much training in alternate modalities for physicians in this country so I went to London, England, where I found an unbroken tradition of complementary and alternative medicine, including many different types of acupuncture, many schools of acupuncture and Chinese medicine, and many different types of massage therapies, homeopathy, and so on.

I also explored different therapies in places like Germany and France and Switzerland. Eventually, I set up an integrative practice in London. We had a psychologist, an osteopath, an acupuncturist, and I practiced family medicine. We also offered homeopathy and massage therapy. This integrative team approach in clinical care was successful back in the '80s.

However, my colleagues were asking me why I wasn't coming back into the fold. Why was I wasting my time with all this "stuff" out there? I told them I saw that by using an approach to care that included complementary therapies and was more of a partnership with my patients, the results were much better and the practice of medicine was more satisfying.

JS: It sounds like a team approach.

BB: It was very much a team approach in all senses. The team includes the doctor, the nurse, the physical therapist or the nutritionist, the psychologist, the traditional Chinese medicine expert, the acupuncturist, the herbalist, the massage therapist, the mind/body practitioner, and the patient. The patient is in the center, and everything gets driven from the patient's problem and their preference. After seeing the value of CAM, in 1991 I came back to the United States to set up the CAM center through the Anesthesiology Department here at the University of Maryland School of Medicine.

JS: Please tell us about the early history of the CAM center at UMM.

BB: In '91, we opened the University of Maryland Center for Complementary Medicine. Initially we were working with the anesthesiologists, and we brought in physical therapists, psychologists, and acupuncturists. Dr. Lixing Lao joined us in '92, and we began to use the team approach. Instead of using drugs or pain injection procedures, we looked at other methods first; if they didn't work we would try some of the more invasive approaches. Over time, we learned to work together as a team, learning where the strengths and weaknesses were.

JS: What misconceptions have you faced that you had to overcome?

BB: The first misconception was that people really didn't know what complementary medicine was; it covers a wide range of therapies and approaches. Also, some thought it was just a placebo and that there was no evidence of efficacy. Back in '91 there really wasn't a whole lot of evidence, and what existed was very scattered. You could not look in MEDLINE to find information about complementary alternative medicine; the search terms weren't there. In fact, the only search term that would show up anything was "therapeutic cults."

JS: How has that changed?

BB: We are now included in the full range of headings, with many different therapies, as part of the National Library of Medicine, which sets the MEDLINE keywords and mesh terms. Our work here shows that you certainly can study complementary therapies in a scientifically rigorous way, and you can stay true to how the therapy is practiced. It's not easy, but it's certainly possible. I believe we demonstrated this in our acupuncture for osteoarthritis series of clinical trials that was eventually published in *Annuls of Internal Medicine*. In the beginning there was a lot of resistance, but we're now at our 20th year anniversary at UM. Barriers have been broken down. In our university, we work together with the cancer center, the shock trauma center, which is one of the largest trauma centers in the country, and the rehab center.

JS: You use CAM therapies in the shock trauma center?

BB: Yes, a few years ago they asked us to work with them to help people who come into the trauma center and develop a hyper-inflammatory state. We began by using acupuncture; they started to see impressive results in reducing pain and inflammation. This led to collaborative studies investigating acupuncture's effect on reducing pain and inflammation. We have also started to bring some of the mind/body approaches to the bedside, including Reiki healing, sound healing, and breathing techniques. We have taught these approaches to over 70 nurses in the trauma center, and they are still using these approaches today.

JS: In the early '90s you served on the advisory committee to the NIH Office of Alternative Medicine. I imagine the acceptance of some of these therapies has changed.

BB: Yes, in the early '90s the NIH set up the Office of Unconventional Therapies (OUT). They had a yearly budget of $2 million when they first started. They issued their first request for applications (RFA) in '93 and had more responses to that RFA than they had in the entire history of the NIH for any RFA. Their title changed to the Office of Alternative Medicine and then became the National Center for Complementary Alternative Medicine. Now their budget has risen to over $100 million a year. NCCAM started to fund larger clinical trials as well as educational initiatives, both in CAM schools as well as conventional medical schools, and supported NIH-funded Centers of Excellence. Our center, focused on TCM and pain management, has been an NIH Center of Excellence since 1995 when we first competed for one of those awards.

Our center helped found, within the international organization, Cochrane Collaboration, the Complementary Medicine Field, in Oxford, England. It now has over 20,000 members in over 100 countries. The mission is to bring together the best evidence in healthcare, to keep this current and to do systematic reviews of the literature. We now work with the National Library of Medicine to include the appropriate mesh terms and headings so people can search and find the literature in this field. We have approximately 40,000 randomized controlled trials in the complementary medicine registry of trials and over 700 systematic reviews in that database. We have brought complementary medicine a long way from being regarded as a "therapeutic cult."

JS: This is the first time the AAAOM conference is being held in collaboration with a medical school. What significance does this hold for you as a champion of integrative medicine?

BB: I think it's time that everybody pulls together to work for the best interests of our patients; there shouldn't be any barriers. Collaboration can greatly advance both clinical care and research, especially if it is done from a place of deep respect. From my perspective, I think there are great advantages, and it really starts with what is best for the patients. I'm delighted that this conference is taking place, and I think that each of us can inform each other about research ideas and about the important questions that need to be answered to improve clinical practice. We need to demonstrate the value, the efficacy, and cost effectiveness of acupuncture for specific diseases. My hope is that breaking down the silos and allowing a mutually beneficial discourse on the best ways to move forward. This conference goes a long ways towards doing this.

Interview: Jeannie Kang, MSTOM, DNBAO, DNBIM, LAc

Jennifer A. M. Stone, LAc interviews Jeannie Kang, president of AAAOM and co-chair of "Whole Medicine: Teaming Up for Our Patients," which will be be held May 12-15, 2011, in Baltimore, MD.

Jeannie Kang, MSTOM, DNBAO, DNBIM, LAc

JS: Please identify the three major challenges you see facing the AOM profession.

JK: The first challenge is to overcome the apathy in the AOM profession. Practitioners need to join a national or state organization to stay informed and engaged as well as take part in advancing the profession. The second challenge is to create the infrastructure for job opportunities for professional graduates, whether in a clinic of their own, in a hospital on staff, in a research center at a university, in an herbal store, or at a community college or a medical school teaching acupuncture or herbology. We need to create the networks that feed these jobs to our graduates. The third challenge is twofold: to form alliances with other healthcare professionals to join in legislative efforts to protect our rights in the mainstream and to improve our educational system so we can better prepare our students for their professional life.

JS: What role does the AAAOM play in meeting those challenges?

JK: First, we are creating more tangible benefits for practitioners. Second, we are laying the groundwork of strategic planning and working with state organizations to become a stronger entity nationally. Third, we will continue to bring other national organizations together to work for common causes and goals. And fourth, we are setting up better communication with our educational leaders to ensure that students have more and better opportunities.

JS: How has the AAAOM changed during your term as president?

JK: Significant changes have been made around how we operate as an organization. We have established a communication network that allows for greater contact among all national organizations, the professional leadership, membership, and students.

We have overhauled our financial systems internally, finished the budget on time, hired a service to facilitate our legislative and regulatory monitoring, and are completing a financial and governance audit of the last two years. Our student organization is functional and very engaged. We are in better communication with other national and state organizations and are asking questions that should have been asked years ago. We are building better working relationships with our sister organizations to stand side by side together in the decision-making processes. A very important change is that we are more proactive, whereas before, we were essentially reactive. Also, for the first time in AAAOM history, we have a membership liaison who spends time only on membership, as we see how important membership is! We are doing our best to build an association that can truly stand on its own and house 30,000 acupuncturists, 8,000 students, and tens of thousands more allied healthcare professionals.

"Our 2011 Whole Medicine conference is designed to be more interactive and engaging, making for a more exciting experience."

JS: How will the upcoming "Whole Medicine: Teaming Up for Our Patients" conference differ from previous AAAOM events?

JK: Our 2011 Whole Medicine conference is designed to be more interactive and engaging, making for a more exciting experience. It is also the first time that we have joined hands with a renowned medical school, where Eastern and Western medicine work together in harmony at the University of Maryland Medical School Center for Integrative Medicine.

It is really up to us to team up for the benefit of our patients! That bottom line is that we are here to serve our patients. The better we bridge our differences, the better we can coordinate our commonalities, helping our patients cultivate health and wholeness to their lives.

JS: How important is U.S. participation in the WHO's ICTM in ICD-11 effort?

JK: The effort to code our diagnostic system and have it adopted into the ICD-11 is very important. The U.S. practitioners are the end users of this project—the largest English speaking community to make use of its end result. By 2014, our community must garner support from the U.S. government (through our Health and Human Services Secretary) to vote yes! that this ICTM project be included in the ICD-11 at the World Assembly. The HHS Secretary is our only vote in this arena as a country, so we need to ensure her support. Beyond our financial needs, we must write letters, make phone calls, and utilize other resources to garner the support needed to finalize this project in 2014!

JS: Please briefly describe your experience at the WHO conference in Japan in December, 2010.

JK: Australia, China, Japan, Korea, Netherlands, Taiwan, and the U.S. were represented. Over 30 representatives broke into different working groups specializing in acupuncture, herbology, and interventions. Everyone's expertise was put into a computerized database where it was cross-referenced and compiled. This is how the original ICD worked, and, due to its success, we used the same model for ICD-11. Primarily China, Japan, and Korea gave input from their countries' databases of ICD codes. The effort was designed to create the best model that can work globally. The meeting took place all day for five days. It was really intense, a lot of work, but in the end, a product we believe will be useful to the world was created. For more details, please visit the WHO website: https://sites.google.com/site/whoictm/

continued on page 17

Acupuncture Practitioner: At the Interface of Patient and Research

By Richard Hammerschlag, PhD

Abstract

For acupuncture research to best reflect and be relevant to current clinical practice, it is essential for experienced acupuncturists to learn the language of research and to participate in both the design and implementation of research studies. As first steps, acupuncture practitioners (LAcs and MDs) are encouraged to become research literate by acquiring the skills needed to search for and critically read published research studies and by attending conference sessions and continuing education classes that focus on current findings and challenges in research. This article also argues that research should be considered as one type of evidence, but by no means the exclusive source of information, when making clinical judgments.

Clinical experience, ancient and modern textbooks, and patient preferences should also be factored into clinical decision making, as was strongly recommended in the original formulation of the evidence-based medicine concept. The current status of acupuncture research is clouded by the paradox that many recent clinical trials have found acupuncture at best to be only marginally more effective than sham needling. Possible explanations for these findings are considered as are alternate research designs that avoid sham controls but compare acupuncture to usual biomedical treatment, assess the effectiveness of acupuncture in real world practice, and evaluate traditional Chinese medicine or other styles of East Asian medicine as a whole system of care. As a bottom line, acupuncture practitioners can provide a valuable service to the AOM profession by reminding researchers that a major goal of research studies should be to improve clinical practice.

Key words
acupuncture research, research literacy, evidence-based medicine, evidence-informed practice, whole systems research

For many acupuncturists (LAcs and MDs), the word "research" conjures up visions of randomized controlled trials with diagnostic and treatment protocols that do not adequately represent their current health care practice. Many acupuncturists are also aware that even in a number of recent large-scale trials in which treatments were tailored to meet individual disease presentation, patients receiving acupuncture did not benefit significantly more than patients receiving sham (placebo) needling (Cummings, 2009). In the face of these research dilemmas, how can acupuncture stakeholders (practitioners and researchers alike) best respond to the conventional medicine community's call for acupuncture to meet the standards of evidence-based medicine (EBM)? The definition of "evidence" should be broadened and the concept of sham acupuncture reconsidered in ways that allow research to continue to support and enhance the clinical practice of acupuncture.

Broadening the Definition of Evidence

It is important to remember that the often stated or implied view of evidence as the summarized findings of randomized controlled trials (RCTs) was explicitly not the intent of the formulators of the EBM concept. In what is generally regarded as the foundational article on EBM, David Sackett and colleagues offered the cautionary note: "Without clinical expertise, practice risks becoming tyrannised [sic] by evidence, for even excellent external evidence may be inapplicable to or inappropriate for an individual patient." (Sackett et al., 1996) The acupuncture community is encouraged to read the complete, short, and clearly written article of Sackett et al. as a means of refuting the view that narrowly equates EBM with RCT results.

As a means of returning to the initial concept of EBM, voices in the contemporary health care community speak of "evidence informed practice" (EIP) to invoke a more accurate reflection of the art and science of healing (Oliver, 2009; Rempher, 2006). The EIP perspective returns to the broader definition of evidence as information the practitioner draws upon from a range of sources to arrive at a clinical decision. Research findings in peer-reviewed journals are important, but only as one portion of the evidence spectrum that, in the context of acupuncture and Oriental medicine (AOM), also includes classical and modern AOM texts, clinical experience, patient preferences, and even practitioner intuition. An excellent example of how research findings as well as clinical experience—both acupuncture and conventional medicine—should be considered when recommending a course of acupuncture for low back pain is described in a recent article from the high-profile *New England Journal of Medicine* (Berman et al., 2010).

Increasing the Clinical Relevance of Clinical Research

Also important is the recognition of a promising trend in recently reported clinical trials of acupuncture: research designs are reflecting an increased relevance to clinical practice. Patient selection criteria and acupuncture protocols are more often being based on a "double screen" procedure that considers both biomedical diagnosis and AOM pattern differentiation (Lao et al., 2001; Alraek & Baerheim, 2003), thus allowing patients with the same biomedical symptoms to be treated with individualized rather than one-size-fits-all acupuncture.

Also encouraging is the current high level of interest in "comparative effectiveness research" (CER) in both conventional medicine (Umscheid, 2010) and complementary and alternative medicine (Fonnebo et al., 2007; Aickin, 2010). In this research design, two or more interventions are compared not to placebo or sham procedures but to each other. In the same manner that a new drug (or surgical procedure) is compared to an existing drug (or procedure), acupuncture can be compared to usual biomedical care. Results from CER can inform choice of treatment options since they reveal not only the comparative effectiveness of acupuncture vs. a biomedical treatment but the relative side effects, onset, duration, and cost benefit of the two interventions. It is of considerable interest that in most of the same large trials in which acupuncture did not outperform sham needling, both real and sham treatments were more effective than usual biomedical care (Cummings, 2009). This finding led the authors of the low back pain article cited above to suggest: "It is not unreasonable to consider acupuncture before or together with conventional treatments, such as physical therapy, pain medication, and exercise" (Berman et al., 2010).

The CER design can also be used to evaluate two different acupuncture protocols, as when different frequencies of electroacupuncture were compared for inducing analgesia prior to oocyte retrieval for IVF (Humaidan et al., 2006). Further, since CER is meant to assess effectiveness of treatments as provided in routine clinical care, it can also be applied to compare clinical outcomes from chart notes in either a retrospective or prospective manner (Aickin, 2010).

Brief mention should also be made of pragmatic trials of acupuncture, in which

practitioners are allowed to treat exactly as they do in clinical practice while the researcher collects and analyzes all aspects of diagnosis, treatment protocol, and outcomes (MacPherson, 2004). The results of such a pragmatic trial of acupuncture for low back pain, performed in England (Thomas et al., 2006), were a major factor in the UK National Health Service's decision to reimburse "a maximum of 10 sessions of acupuncture over a period of 12 weeks for people with low back pain that has persisted for more than 6 weeks" (NICE, 2009).

An emerging study design called Whole Systems Research is of special interest to the AOM community since it allows multimodality *systems* of care, e.g., traditional Chinese medicine (TCM) and biomedicine, to be compared (Verhoef at al., 2005). In such studies, which are well-suited for clinical trials of chronic conditions, patients in the TCM group are treated with acupuncture, herbal therapy, massage, life-style advice and other options within a wide range of pre-determined protocols at the discretion of the practitioner (Ritenbaugh et al., 2008).

Contributions of Basic Research to Understanding Acupuncture

Basic research that asks the question "How does acupuncture work?" can also impact clinical practice as well as reveal new insights as to how the body heals itself. When early research found electroacupuncture at different frequencies released different types of endogenous opioids (endorphins) in a manner that improved analgesia (Han, 2003), electrostim devices were designed to include a setting that automatically toggles between high and low frequencies. More recently, research showing that the clinical "needle-grasp" phenomenon involves wrapping of connective tissue fibers around the needle (rather than involving muscle contraction) has kindled great interest in the role of fascia as a mediator of acupuncture action (Langevin et al., 2002; Ahn et al., 2010).

Basic research in the area of brain imaging studies is also helping to resolve the previously mentioned dilemma that an increasing number of clinical trials have reported acupuncture treatments, at most, only marginally more effective than sham acupuncture—findings apparently at odds with traditional theories regarding acupuncture point specificity. However, despite the similar reductions in patient-reported pain, the two types of needling appear to promote analgesia by activating distinct neural pathways (Harris et al., 2009; Kong et al., 2009). The sham needling paradox has been addressed more fully in a recent white paper from the board of the Society for Acupuncture Research (Langevin et al., 2011). One line of reasoning presented is that "ignorance of acupuncture mechanism prevents us from knowing what to avoid when inserting a sham acupuncture needle. In particular when numerous sham needles are inserted, there may be a cumulative, beneficial effect resulting from multiple stimulations of superficial sensory nerve endings or connective tissue (two commonly discussed targets of acupuncture needling)."

Research as a Bridge Between AOM and Conventional Medicine

Research, both clinical and physiological, represents a common language of health care that stimulates interactions between the AOM and conventional medicine communities. Research findings can serve as an effective catalyst for increasing cross referrals between health care practitioners and for promoting collaborative patient care. LAcs are also often told by potential new patients that their MD suggested they try acupuncture at least in part because of research showing that acupuncture may be effective for the patient's condition that had not responded to conventional treatment.

LAc involvement in research can be at two levels. The first, often called research literacy, entails the ability to understand reports of research findings in the media and in scientific journals and to discuss them with patients and other health care practitioners. Skills for becoming research literate include knowing how to frame a question that can lead to web-based information on clinical trials for a specific condition and the facility to evaluate the quality of studies identified by the search (Kreitzer et al., 2010). The second level of involvement is to participate as an active collaborator in research (Wayne et al., 2008). Experienced acupuncturists are essential not only to provide effective treatments in clinical or mechanistic studies but also to inform all aspects of research—from identification of relevant hypotheses to be tested to development of treatment interventions, choosing outcome measures, and interpretation of results. In addition to contributing to the scientific evidence base of acupuncture, participation in research can provide practitioners with hands-on opportunities for professional development, additional sources of income to that earned in clinical practice, and increased visibility in the biomedical community that could improve patient referrals.

Paths to Research

How then can LAcs enhance their access to, understanding of, and even participation in, research? An excellent introduction to the language and concepts of research, especially from the complementary and alternative medicine (CAM) perspective, is Martha Brown Menard's *Making Sense of Research* (2nd edition; 2009. Curties-Overzet, Toronto). An overview of current findings and issues directly relevant to acupuncture research can be found in *Acupuncture Research: Strategies for Establishing an Evidence Base*, (edited by Hugh MacPherson and others, 2008. Elsevier, Edinburgh). The book contains an especially helpful chapter that describes ways for acupuncturists to become involved in research studies (Wayne et al., 2008).

An essential skill for accessing research articles is navigating PubMed, the National Library of Medicine's free on-line site: http://www.ncbi.nlm.nih.gov/pubmed. Use the site's guide or find a health care colleague who can give you an introductory lesson. PubMed includes articles from a wide variety of AOM and CAM journals, as well as from the impressively large numbers of biomedical journals that publish occasional articles on acupuncture (Hammerschlag et al., 2011). While PubMed always provides the abstract of an article, a small but increasing number of full-length articles can also be downloaded at no cost.

Other means to become more familiar with the culture and content of research include attending research-related sessions at meetings of the American Association for Acupuncture and Oriental Medicine (AAAOM) and other AOM-relevant conferences and continuing education seminars, as well as speaking with health care colleagues who have participated in research projects. Also, many acupuncture colleges now offer courses in research that LAcs may be permitted to audit.

Another readily available path to keep informed and involved with AOM-relevant research is to become a member of the Society for Acupuncture Research (SAR): http://www.acupunctureresearch.org. Each of the recent SAR conferences has offered workshops that introduce acupuncture practitioners and students to the current issues and results of clinical and basic research. Of additional interest, SAR will soon be providing condition-based research summaries as a membership benefit.

As a concluding thought: acupuncture practitioners can provide a valuable service to the research community, and ultimately to the AOM profession, by reminding researchers that a major aim of their studies is to improve clinical practice and that research should be designed with this aim clearly in mind.

Acknowledgements

Many thanks to Richard Harris, PhD, current co-president of SAR, and Sue Fleishman, research education specialist,

for helpful comments on early drafts of this paper. Thanks also to Lixing Lao, PhD, LAc and Roni Posner, EdD for strengthening ties between SAR and AAAOM.

References

Ahn AC, Park M, Shaw JR, et al. Electrical impedance of acupuncture meridians: the relevance of subcutaneous collagenous bands. *PLoS One* 2010;5(7):e11907.

Aickin M. Comparative effectiveness research and CAM. *J Altern Complement Med* 2010;16(1):1-2

Alraek T, Baerheim A. The effect of prophylactic acupuncture treatment in women with recurrent cystitis: kidney patients fare better. *J Altern Complement Med* 2003;9(5):651-658.

Berman BM, Langevin HM, Witt CM, Dubner R. Acupuncture for chronic low back pain. *N Engl J Med* 2010;363(5):454-61.

Cummings M. Modellvorhaben Akupunktur – a summary of the ART, ARC and GERAC trials. *Acupunct Med* 2009;27(1):26-30. [in English]

Fønnebø V, Grimsgaard S, Walach H, et al. Researching complementary and alternative treatments – the gatekeepers are not at home. *BMC Med Res Methodol* 2007;7:7.

Hammerschlag R, Milley R, Colbert A, et al. Randomized Controlled Trials of Acupuncture (1997-2007): An assessment of reporting quality with a CONSORT- and STRICTA-based instrument. *Evid Based Complement Alternat Med* 2011;183910. Epub 2010 Oct 3.

Han JS. Acupuncture: neuropeptide release produced by electrical stimulation of different frequencies. *Trends Neurosci* 2003;26(1):17-22.

Harris RE, Zubieta JK, Scott DJ, et al. Traditional Chinese acupuncture and placebo (sham) acupuncture are differentiated by their effects on mu-opioid receptors (MORs). *Neuroimage* 2009;47(3):1077-85.

Humaidan P, Brock K, Bungum L, Stener-Victorin E. Pain relief during oocyteretrieval – exploring the role of different frequencies of electro-acupuncture.*Reprod Biomed Online* 2006;13(1):120-5.

Kong J, Kaptchuk TJ, Polich G, et al. Expectancy and treatment interactions: a dissociation between acupuncture analgesia and expectancy evoked placebo analgesia. *Neuroimage* 2009;45(3):940-9.

Kreitzer MJ, Sierpina V, Fleishman S. Teaching research literacy: a modelfaculty development program at Oregon College of Oriental Medicine. *Explore* 2010;6(2):112-4.

Langevin HM, Churchill DL, Wu J, et al. Evidence of connective tissue involvement in acupuncture. *FASEB J* 2002;16(8):872-4.

Langevin HM, Wayne PM, Macpherson H, et al. Paradoxes in acupuncture research: strategies for moving forward. *Evid Based Complement Alternat Med* 2011;180805. Epub 2010;Oct 11.

Lao L, Ezzo J, Berman B, Hammerschlag R. Assessing clinical efficacy of acupuncture: considerations for designing future acupuncture trials, In: *Clinical Acupuncture: Scientific Basis* 2001 (ed. Stux G, Hammerschlag R) Springer, Berlin, pp.187-209.

MacPherson H. Pragmatic clinical trials. *Complement Ther Med* 2004;12:134-140.

NICE. Low back pain: early management of persistent non-specific low back pain: Clinical guideline no. 88. London: *National Institute for Health and Clinical Excellence,* 2009.

Oliver S. Participatory and evidence-informed general practice. *Br J Gen Pract* 2009;59(563):397-8.

Rempher KJ. Putting theory into practice: six steps to success. *Amer Nurse Today* 2006;1(2):www.americannursetoday.com/article.aspx?id=5142&fid=5120

Ritenbaugh C, Hammerschlag R, Calabrese C, et al. A pilot whole systems clinical trial of traditional Chinese medicine and naturopathic medicine for the treatment of temporomandibular disorders. *J Altern Complement Med* 2008;14(5):475-87.

Sackett DL, Rosenberg WM, Gray JA, et al. Evidence based medicine: what it is and what it isn't. *BMJ* 1996;312(7023):71-2.

Thomas K, MacPherson H, Thorpe L, et al. Randomised controlled trial of a short course of traditional acupuncture compared with usual care for persistent non-specific low back pain. *BMJ* 2006;33(7569):623-628.

Umscheid CA. Maximizing the clinical utility of comparative effectiveness research. *Clin Pharmacol Ther* 2010;88(6):876-9.

Verhoef MJ, Lewith G, Ritenbaugh C, et al. Complementary and alternative medicine whole systems research: beyond identification of inadequacies of the RCT. *Complement Ther Med* 2005;13(3):206-12.

Wayne P, Sherman K, Bovey M. Engaging acupuncturists in research – some practical guidelines. In: *Acupuncture Research: Strategies for Establishing an Evidence Base.* 2008 (ed. MacPherson H, Hammerschlag R, Lewith G, Schnyer R) Churchill Livingstone Elsevier, Edinburgh, pp. 219-237.

Emeritus Dean of Research Richard Hammerschlag, PhD retired in 2009 from the Oregon College of Oriental Medicine, Portland, OR, after creating and directing OCOM's research department over a 10-year period during which the college received NIH grants for collaborative clinical research on acupuncture and herbal therapies as well as research education. In his prior 25-year career in neurobiology research he served as associate chair of Neurosciences at the City of Hope National Medical Center, Duarte, CA. He was co-president of the Society for Acupuncture Research from 1997-2003 and co-edited *Acupuncture Research: Strategies for Building an Evidence Base* (2008).

Kang Interview continued from page 14

JS: Why do you think membership in the AAAOM is important?

JK: The AAAOM represents a communication hub that connects the profession in many important ways. We provide referrals for acupuncturists nationwide, track all legislation and regulation for the profession at state and national levels, seek discounts for members on products and services, further research and publishing in the profession through *The American Acupuncturist*, and galvanize a common voice through our annual conferences—among many other efforts. It's a lot to do for an all volunteer board with a small staff, and we're always looking to do more.

JS: Where do you see the AOM profession to be in ten years?

JK: If all goes well, we will have an entry level professional doctorate, student loan forgiveness, and mandated reimbursement in government and commercial programs. AOM will exist as a stand-alone department at schools like UCLA, Standford, John Hopkins, etc. Acupuncturists will have jobs in hospitals, clinics, and research institutions all over the country, NIH will invest tens of millions of dollars for research on AOM, and traditional medicine will be included in the ICD. We will have standardized titling and degrees in the U.S., with AAAOM representing minimally 60% of the practitioners and all the students in its membership, and full time practitioners nationwide will earn a good living in this field.

Characteristics and Correlations Between Human and Pet Use of Acupuncture: A Cross-sectional Survey of Four Clinics

By Ella Woods, DAOM, Adam Burke, PhD, MPH, LAc, and Katrina S. Rodzon, MA

Abstract

Background: National surveys of complementary and alternative medicine (CAM) have shown relatively stable or growing interest. These studies examined general use and use for specific health concerns and by specific populations. One area that has received inadequate attention is use of alternative therapies with animals. For this reason a study was conducted on veterinary acupuncture practice to ascertain who was using this treatment for their animals, for what purposes, with what outcomes, and how pet and owner use was associated.

Methods: Anonymous surveys were completed by a convenience sample of respondents who brought their pets to small animal veterinary practices in the San Francisco Bay Area over a four-week period. One site was a large referral practice of veterinary specialists, and three were general veterinary practices.

Results and Discussion: Respondents (n = 173) were a mean age of 44.7 and more likely to be female, Caucasian, currently married or living with a partner, with no children, and having higher levels of income and educational attainment. Slightly over half of the respondents reported using acupuncture for themselves. Individuals who used acupuncture were more interested in natural health, including purchasing organic food. Of all respondents surveyed, 32% reported using acupuncture with their animals. Respondents reported being satisfied with acupuncture as a helpful treatment for the animals. In this sample the animals that received acupuncture were more likely to be older dogs with a lower reported health status. Arthritis was the leading reason for acupuncture treatment. A regression predicting use of veterinary acupuncture showed the most significant predictors to be purchasing organic food for the animal, the animal's age (older), and the respondents not having children in the home. These findings reflect the importance of animals in the family and the willingness of some owners' to use alternative methods of treatment.

Conclusions: Given the growing use of complementary and alternative methods in both human and veterinary medicine more research is needed. Future investigations would benefit from the use of larger population-based samples to increase knowledge and to help inform modern veterinary education and practice.

"Although our understanding of the use of alternative medicine generally, and acupuncture specifically, by adults in the U.S. is increasing, there is limited information on its use with animals, such as companion animals."

Key words

acupuncture, veterinary acupuncture, consumer characteristics, musculoskeletal disorders

Background

History of Veterinary Acupuncture in China

Acupuncture has been a part of veterinary medical care in China for a millennium. In Europe it has been used for a century. Now in recent decades it has been finding its way into veterinary practice in the United States. The earliest known book on veterinary acupuncture, *Bai Le Zhen Jing (Canon of Veterinary Acupuncture)*, was believed to have been authored during the 6th century CE. It described treatment for a variety of farm animal diseases. During subsequent periods the literature on veterinary medicine grew significantly, including works on herbal therapy and specialized texts focusing on specific animals. During the Tang Dynasty (618-907 CE), an important work was written on veterinary differential diagnosis. In the Song dynasty (960-1279 CE) the government collected and systematically organized the veterinary literature. The Yuan (Mongol) and Ming Dynasties (1279-1368 CE and 1368-1644 CE respectively) produced several notable works focused on equine acupuncture, herbal therapy, and moxibustion.

Two famous veterinarian brothers wrote the *Yuan Heng Liao Ma Ji (Yuan and Heng's Therapeutic Treatise of Horses)* during the late Ming period. This work is still influential today. They also wrote two more treatises on oxen and camels. Following several centuries of declining status during the Qing Dynasty (1644-1911 CE), traditional medicine found renewed value as an accessible and affordable means of treatment in post-dynastic China. Since 1949, the year of the founding of the People's Republic of China, many books on traditional veterinary medicine and veterinary acupuncture have been written. *Hsing Yue Ma Ching (The New Treatise on Horses and Cattle)*, written by Kim Chung Tze in 1955, was the first Chinese traditional veterinary medicine text to use modern terminology.

History of Veterinary Acupuncture Use in the U.S.

National surveys have reported stable or growing use of complementary and alternative medicine (CAM) by the general public in the United States.[1,2,3,4,5] In terms of acupuncture use specifically, the National Health Interview Surveys (NHIS) conducted by the Centers for Disease Control and Prevention reported lifetime use of acupuncture during the previous 12 months to be 1.1% in 2002[6] and 1.4% in 2007.[7] Information on substantial out-of-pocket expenditures on CAM products and services was also reported.[8,9] In addition to studies examining consumer utilization, important work on efficacy has provided evidence for the beneficial use of acupuncture for a variety of conditions, such as back pain,[10],osteoarthritis,[11] and chemotherapy-induced nausea.[12]

Although our understanding of the use of alternative medicine generally, and acupuncture specifically, by adults in the U.S. is increasing, there is limited information on its use with animals, such as companion animals. A 2003 National Pet Owner Survey, conducted by the American Animal Hospital Association, found 21% of respondents reporting use of CAM for pets. Treatments included acupuncture, acupressure, chiropractic, homeopathy, herbal remedies and massage. This was up from 6% reported use in their 1996 survey.[13] One other study provided information on a survey conducted at the Colorado State University Animal Cancer Center with 254 pet owners seeking care for a dog or cat. The study reported use of one or more CAM methods by 65% of the respondents, with nutritional supplements being the most typical CAM therapy employed.[14]

Medical Practice—From Humans To Animals

Practices from human medicine are often eventually adopted in veterinary medicine. The first human kidney transplant surgery was performed in 1950. Transplants for dogs and cats followed in 1987.[15] Erythropoietin was first used to treat chemotherapy-induced anemia in humans and was quickly assimilated

into the cancer therapy regimen for cats and dogs.[16] A team of Swedish doctors successfully implanted the first internal cardiac pacemaker in a human patient in 1957.[17] The first pacemaker used clinically in a dog was implanted in 1967.[18] Given the growing use of CAM in human populations, it is anticipated that its use will eventually become an increasingly important aspect of health care for animals. For this reason, and due to the absence of information on this important evolving aspect of veterinary care, a pilot study was conducted to explore animal acupuncture utilization generally, and the relationships between owner characteristics and animal acupuncture use specifically.

Methods

Design and Sample

A cross-sectional convenience survey sample design was used for the study. A total of 179 surveys were collected. Data collection was conducted at four urban veterinary clinics in the greater San Francisco Bay Area, and all four clinics predominately treated small animals. One site was a large, multi-specialty veterinary hospital in San Francisco. It provided 24-hour, seven-day-a-week critical care and emergency services to the greater Bay Area and offered acupuncture as one of its modes of treatment. The other three sites were smaller, general practice veterinary facilities, none of which offered acupuncture directly.

The four sites selected provided a range of care settings, from a large hospital-based service to smaller general practice clinics. Selection of sites from the greater San Francisco Bay area was deemed practical for this exploratory work, as there tends to be a higher rate of human acupuncture utilization in large metropolitan coastal cities such as San Francisco, and acupuncture use among adults is highest on the West Coast.[19] It was presumed that conducting the survey in this region would increase the probability of finding consumers who used acupuncture for their own healthcare. This was a prerequisite, in order to make comparisons between use by humans and their pets.

Questionnaire

A 24-item questionnaire was designed by the authors to gather exploratory information on users of veterinary acupuncture services and their animals. Items used included common demographic variables, items on the animal's characteristics, and human and animal acupuncture use and satisfaction questions. All items had high face validity. A balanced closed-ended Likert type question format was used for many of the items, such as a five-choice response ranging from "Very Satisfied" to "Very Dissatisfied." The draft survey was reviewed by veterinary and acupuncture peers for readability and item relevance. The revised final version was pilot tested with a sample of patients at two of the respective clinics. The final questionnaire included twelve questions about the animal's owner, including demographics, health conditions, and personal use of acupuncture; ten questions about their pet(s), including demographics, health problems, and use of veterinary acupuncture; and two questions related to knowledge of acupuncture for animals. The acupuncture college, ACTCM, having human subjects oversight of this study, approved the use of the questionnaire. In lieu of signed consent forms, a passive informed consent process was employed as the survey was anonymous, confidential, and voluntary. The survey instructions stated that "Filling out this survey implies your consent to participate in the study."

Procedure

Data was collected in the waiting area of the four sites during a 4-week period in summer, 2008. The survey materials were placed in a central location in the waiting rooms with signage to attract attention and invite participation. A total of 179 questionnaires were collected. Based on billing records, this number was estimated to represent a 10% response rate for animals brought in for treatments, such as acupuncture, during the survey period. Of the questionnaires submitted, six were incomplete and/or completed by minors, leaving a total of 173 for analysis.

Results

Sociodemographics

The respondents were an average age of 44.7 years, primarily female, Caucasian , married or living with a partner, educated (bachelors degree or higher - 74.9%), home owners, and with a high socioeconomic status. The majority had no children or, if they had children, it was common that the children no longer lived at home. (Table 1) Respondents who used acupuncture for themselves were compared with those who did not on these sociodemographic variables. There were essentially no significant differences between the two groups on important sociodemographic variables. In addition, respondents who used acupuncture for their animals were compared with those who did not on these same items to see if the two groups differed (Table 2). Similarly, in this sample, there were no outstanding differences between the two groups, except that individuals who used acupuncture for their animals were significantly less likely to have ever had children. Overall, in both groups—users and non-users of acupuncture for self or pets—participants tended to be mid-40s, female, Caucasian, well-educated, and married or partnered. Finally, 83% of all participants reported that their animal had an "Extremely" important place in the family. This was similar for all respondents, whether or not they or their animals had ever received acupuncture.

Table 1: Respondent Sociodemographics

Item	Frequency	Percent
Gender		
Female	133	78.2
Male	37	21.8
Race/Ethnicity		
White, Caucasian	138	80.7
Hispanic	13	7.6
Asian American	9	5.3
African American	1	0.6
Other	10	5.8
Educational Attainment		
High School	4	2.3
Some College/ Trade School	39	22.8
Bachelors Degree	54	31.6
Some Graduate School/ Graduate Degree	74	43.3
Marital Status		
Currently married/With partner, not married	95	55.6
Single, no partner	48	28.1
Partner, not living together	17	9.9
Separated, Divorced, Widowed	11	6.4
Income		
$0 - $50,000	38	22.6
$50,001 - $100,000	41	24.4
$100,001 - $175,000	52	31
$175,001 +	37	22
Homeowner		
Yes	95	55.9
No	75	44.1
Number of Children		
0	121	71.2
1+	49	28.8
Number of Children Still at Home		
0	17	45.9
1-3	20	54.1

Human Health Perspective

Most survey respondents (62.6%) considered their own health to be "Very Good" or "Excellent" on a standard 5-point scale. (Table 3) Lifetime acupuncture use was common

Table 2: Sociodemographic Differences Between Acupuncture Users and Non-Users

Item	Use (for self)	Not-Use (for self)	Significance
Age (average # of years)	45.3	44.1	0.533
Income (average–approximate)	$105,000	$95,000	0.625
Female	80.2%	75.9%	0.313
Race (White)	80.2%	81.3%	0.853
Education (graduate level)	42.9%	43.8%	0.476
Married/Partnered	58.3%	52.6%	0.825
Number of Children (0)	73.6%	68.4%	0.499
Animal's Place in Family (Extremely Important)	82.6%	83.5%	0.716
Item	Use (for pets)	Not-Use (for pets)	Significance
Age (average # of years)	44.9	44.8	0.934
Income (average–approximate)	$94,000	$106,000	0.48
Female	77.8%	77.9%	9.89
Race (White)	87.0%	78.9%	0.145
Education (graduate level)	38.9%	44.8%	0.241
Married/Partnered	53.7%	57.1%	0.629
Number of Children (0)	83.0%	65.8%	.027*
Animal's Place in Family (Extremely Important)	88.9%	79.8%	2.51

**NOTE: for this item the total equals 175 as two respondents brought in two animals.*

(53.5%), and there was no significant difference in reported health status between the group that used acupuncture personally and those that had never tried it. Of those who had used acupuncture, the majority were quite satisfied with the outcome (76.1%), and found the treatments to be "Moderately" to "Extremely" helpful (79.6%). Those who used acupuncture for personal use were also significantly more likely, compared to those who had not, to hold a stronger commitment to natural healing methods for themselves and to purchasing organic food for their own consumption (p=.001 and p=.002 respectively).

Animal Health Perspective

The animals brought in for treatment were primarily dogs (54.3%) and cats (43.4%). Of those animals, 32% had received veterinary acupuncture at some point (not necessarily during the current visit) (Table 3). Satisfaction with those acupuncture treatments was high, with 86.7% of respondents reporting being "Satisfied" or "Very Satisfied" with the outcome (Table 2). In addition, 88.4% reported that the acupuncture was "Moderately" to "Extremely" helpful for their animals' conditions. In this sample, dogs were more likely to receive acupuncture than cats, but the difference did not reach significance (p=.058). There was also a significant difference in use of veterinary acupuncture based on reported health status and age of the animal. Animals with lower reported health were significantly more likely to receive acupuncture (p=.015). Age was significant for dogs. Older dogs, average age 9.2 years, received acupuncture versus those that did not, average age 5.6 (p<.001). Cats in both groups, those receiving acupuncture and those not, were around 11 years of age. Arthritis, with its resulting pain and lameness, was cited by 44.9% of respondents as a primary reason for seeking acupuncture treatment. However, numerous other reasons were also cited, including poor appetite, diarrhea, weight loss, cancer, diabetes, urinary tract infection, renal, hepatic, and/or cardiac disease, prevention, immune support, and maintaining well-being.

Relationships Between Respondent and Pet Acupuncture Use

A regression analysis was conducted to further understand the association between key human and animal variables in relationship to use of acupuncture. The outcome variable was lifetime use of acupuncture for the animal receiving treatment at the time of survey completion. Predictor variables from the three areas of interest were included: (1) sociodemographics: having children; (2) human characteristics: personal use of acupuncture, health status, commitment to natural healing methods, buying organic foods for self; and (3) animal characteristics: type of animal, age, health status, organic food for pet. A binary logistic regression was performed and revealed significant predictors included: not having children (p=.036), animal's age (older; p=.005), and feeding the animal organic food (p=.001). Being a dog approached significance (p=.054). (Table 4) A Hosmer Lemeshow test provided evidence of goodness of fit for the model (p=.243).

Discussion

Sociodemographics

Several characteristics found to be related to CAM use for humans in national surveys, including being middle-aged, female, and having a higher annual income,[20] were found to be common in this study as well. One sociodemographic characteristic that did stand out was the association between veterinary acupuncture use and not having children. The majority of respondents who used acupuncture with their animals never had children or, if they had children, it was common that the children no longer lived at home. This suggests that the animal may play a very important role in the family and, as a consequence, receive greater attention, such as elective veterinary services. A related survey conducted by Albert and Bulcroft (1988) of 320 pet owners and 116 non-owners found that pets were an important part of the family in urban settings and that attachment to pets was highest among never-married, widowed, divorced, remarried, empty-nesters, childless couples, and newlyweds.[21]

Human Health Perspective

In this sample, 53.5% of participants reported lifetime acupuncture use for themselves. This is very high. Data from the National Health Interview Survey (NHIS) CAM Supplement found lifetime acupuncture use in a national sample of 31,044 adults to be 1.1% in 2002[22] and 1.4% in 2007.[23] Recent acupuncture use in the 2002 NHIS study was significantly associated with being an Asian female, living in the Northwest or West, having a higher level of education, poorer self-reported health status, or being an ex-smoker.[24] The high level of use found in this study may be associated with living in a region of high acupuncture usage, being more educated, and having more disposable income.

Animal Health Perspective

Arthritis was reported to be the most common reason for use in this animal sample. This finding reflects the common use of CAM and acupuncture for musculoskeletal problems in human populations, such as for treatment of back pain.[25,26,27,28] A survey conducted by Tufts University Cummings School of Veterinary Medicine, with over 1100 individu-

Table 3: Characteristics of Acupuncture Use by Respondents and Their Animals

Item	Frequency	Percent
Lifetime Acupuncture Use for Respondent		
Yes	92	53.5
No	80	46.5
Satisfaction with Acupuncture		
Very Satisfied	34	37.0
Satisfied	36	39.1
Neutral	14	15.2
Dissatisfied	7	7.6
Very Dissatisfied	1	1.1
Perceived Helpfulness of Acupuncture		
Extremely Helpful	22	25.0
Very Helpful	27	30.7
Moderately Helpful	21	23.9
Slightly Helpful	8	9.1
Not Helpful	10	11.3
Lifetime Acupuncture Use for Animal		
Yes	54	32.0
No	115	68.0
Satisfaction with Acupuncture		
Very Satisfied	27	50.9
Satisfied	19	35.8
Neutral	5	9.4
Dissatisfied	1	1.9
Very Dissatisfied	1	1.9
Perceived Helpfulness of Acupuncture		
Extremely Helpful	18	34.6
Very Helpful	19	36.6
Moderately Helpful	9	17.3
Slightly Helpful	3	5.8
Not Helpful	3	5.8
Type of Animal Receiving Treatment *		
Dogs	95	54.3
Cats	76	43.4
Other (rabbit, hamster, guinea pig)	4	2.3

"The animals brought in for treatment were primarily dogs (54.3%) and cats (43.4%). Of those animals, 32% had received veterinary acupuncture at some point."

als, found the most common diseases reported by owners for their cats and dogs to be musculoskeletal, dental, gastrointestinal tract, and hepatic disease.[29] Survey respondents also mentioned use of acupuncture as a treatment to enhance animal well-being. This motive for use was also found to be common in a CAM veterinary oncology survey conducted at Colorado State University Animal Cancer Center [30] and has been shown to be a common motive for CAM use in surveys of human populations as well.[31] Finally, acupuncture was used significantly more for dogs than for cats. It is possible that individuals spend comparatively more physically active time with their dogs than their cats, such as taking walks and playing catch, thereby increasing the probability that they will observe signs of musculoskeletal pain or dysfunction.

Relationship Between Personal and Animal Acupuncture Use

A regression equation performed to examine the best predictors of acupuncture use for the respondents' animals revealed significant associations with several variables: not having children (p=.036), the animals age (older, p=.005), and purchasing organic food for the animal (p=.001). Perhaps the most interesting association is that of veterinary acupuncture use and the purchase of organic food for the animal receiving treatment. This could reflect a high "family-member" status for urban pets and/or the pet owners' attempts to provide a more therapeutic diet for the sick animal. It also reflects the growing trend noted by the pet industry toward the purchase of natural and organic products for family pets.[32]

Limitations and Observations

This exploratory study was conducted to obtain preliminary data on veterinary acupuncture usage patterns and on the characteristics of owners and pets related to such use. The study was limited by the use of a small, regional convenience sample. The 10% response rate for the self-administered survey also increases the probability of the sample being non-representative of all individuals using services at the four survey sites. Together these limit the generalizability of findings. Subsequent investigations would benefit from employing a larger population-based representative sample.

Conclusions

Even though national studies show relatively stable or growing interest in the use of CAM for humans,[33,34,35] there is a dearth of corresponding information related to use with small animals. This study addresses that issue by providing insight into individuals who select acupuncture for their companion animals. These findings provide information, based on a limited sample, suggesting that consumers who used acupuncture were themselves committed to natural healing and believed that the acupuncture was beneficial for their animals. Given the potential role of acupuncture and CAM for veterinary medical treatment, additional research is needed. Increasing our knowledge in this area will help to inform both future research and the training of veterinary clinicians in treatment options and patient education.

continued on page 27

Table 4: Logistic Regression Predicting Veterinary Acupuncture Use

Item	Beta	Wald	Sig	Exp(B)	CI of Exp(B)	Exp(B)
Sociodemographic						
Having Children	-1.04	4.38	0.04	0.36	0.14	0.94
Health Perspective - Human						
Acupuncture for Self	0.81	2.90	0.10	2.25	0.89	5.70
Natural Health Orientation	0.38	1.83	0.18	1.46	0.84	2.52
Health Status	0.22	0.69	0.41	1.24	0.07	2.08
Organic Food for Self	-0.30	0.24	0.63	0.74	0.22	2.47
Health Perspective - Animal						
Organic Food for Animal	1.49	10.61	0.00	4.42	1.80	10.82
Age of Animal	-0.15	8.01	0.01	0.86	0.78	0.96
Type of Animal	0.93	3.72	0.05	.2.252	0.99	0.65
Health Status of Animal	-0.22	1.01	0.32	0.80	0.52	1.23

Acupuncture, 1965-85: Birth of a New Organized Profession in the United States, **Part 2**

By Sherman Cohn, BSFS, JD, LLM

(This paper was first presented as a talk at the 2008 AAAOM conference. It is still a work in progress, with plans to turn it into a published piece. Part 1 appeared in *The American Acupuncturist,* Vol. 54)

Part 2 of 2 Parts:

As noted in Part 1, Robert M. Duggan played an important role in helping establish the licensing requirements for acupuncture education and practice in California. He also worked hard towards its recognition in Maryland. Bob, originally a Roman Catholic priest, had been mentored by the great iconoclast, Ivan Illich. In 1967 he resigned from the priesthood and studied humanistic psychology with Rollo May, among others. In his studies, Bob repeatedly came across the concept of human "energy," but he never found any clear explanation about what it is.

He received a master's from New York University in 1970 and married Dianne Connelly, also a graduate of NYU. They traveled for a year throughout Asia from India to Japan and back, although not to mainland China, exploring various ways of thinking and looking for an explanation of human "energy." While in Asia, they came across charts of human beings illustrated with points and lines. When they asked what those charts meant, they were told to ignore the charts—they were merely "grandmothers' nonsense."

In August, 1971, when they stopped in London on their way home, they were both quite ill, and no medical doctor had been able to help them. A friend suggested they visit J.R. Worsley, an osteopath who had been studying and practicing acupuncture. Although his office was a four hour drive from London, they went to see him. After two treatments each, they both recovered.

Having personally experienced the effects of acupuncture, they urged Worsley to spread his knowledge. They arranged for him to do speaking tours in the U.S. When they asked him to teach acupuncture to them, his response was: get a class together, and he would teach them and arrange for others to teach. Bob and Dianne recruited thirty-four other interested people, and in September, 1972, Dr. Worsley started a school in Kenilworth, England. Most, but not all, of the thirty-six students were from the United States. This group included Fritz Smith, Harriet Beinfield, Efrem Korngold, Jack Daniel, Jim McCormick, Julia Measure, Marion Skelly, and Hal Bailen, MD. In Bob's words, "All these people had been interested in the art of healing before they were interested in acupuncture. They knew something about the life force and were looking for a deeper understanding. Many of them had been connected with humanistic psychology, some with distance healing, some with various forms of body work and the martial arts."

Class was held 10 hours a day, 7 days a week, for 4 weeks—twenty-eight straight days of lectures by Dr. Worsley and the other practitioners he recruited to teach. At the end of the instruction he gave them all diplomas and said: "Now, go do it. See what works for you," but the students protested that they needed clinical experience. So in February, 1973, Worsley gathered them for two weeks of clinical experience and again sent them off. Bob and Dianne and a few others rented some space in a Buddhist monastery outside Oxford, England, and started a clinic.

Later in 1973, Bob and Dianne recruited another group of about thirty students who came to study with Dr. Worsley for a month of classes followed by a month of clinic instruction. Bob and Dianne helped with the teaching. The school repeated the same program with more students in 1974. After this, Bob and Dianne were ready to return to the United States to open a clinic and a school. They chose Maryland, as it had a statute which permitted the practice of acupuncture under the general supervision of a medical doctor who need not be on the premises.

A personal note: This is when I first became involved. In the late 60s or early 70s, I did some consulting work with a New York lawyer, Mark Penzer. Mark's wife had a medical condition for which there was no allopathic treatment and which was fatal. Mark scoured the world for help and found J.R. Worsley. When he took his wife to see Dr. Worsley, he met Bob and Diane. He helped them decide that Maryland was an appropriate place for them to settle and start their work. Mark then referred them to me in my capacity as an attorney. (When they came to my office, I am not sure that I had ever heard of acupuncture.)

Of course, there were problems. To open a school, there had to be approval by the Maryland Commission on Higher Education. The Commission said that to approve anything in the health field, we need guidance from the Board of Medical Examiners. The Medical Examiners said, "We know nothing about acupuncture." (This "Catch-22" was eventually resolved in 1980.)

Meanwhile, Bob and Dianne opened the Traditional Acupuncture Center. Haig Ignatius, MD, a 1973-74 graduate from the second Worsley program, was the supervising medical doctor for the acupuncture treatments. In 1975 they also founded the Traditional Acupuncture Institute to teach acupuncture. Students officially enrolled in the Worsley school in England and attended classes there, but they also attended "seminars" and did some clinical training at the Institute in Maryland. The students were officially graduated from the Worsley school in England. Thus, beginning in 1975, the Worsley school was located both in England, where it was legal to teach acupuncture, and in Columbia, Maryland.

During these early days, the Maryland Medical Society decided to go after acupuncturists for practicing medicine without a license. At one point, the sheriff actually showed up to arrest Bob and Dianne, who asked me to represent them. It took a bit of time, but ultimately the sheriff was convinced that acupuncture was legal in Maryland and that general supervision by a medical doctor on the premises satisfied the Maryland law.

How was the political problem solved in Maryland? Here is some background: Bob treated the wife of the then United States Attorney for Maryland, but this person could not help with Bob's situation. He had, however, been a partner at Piper Marbury, a major Baltimore law firm. The U.S. Attorney contacted one of his Piper Marbury partners who had been the campaign treasurer for the then governor of Maryland. The governor became interested and told the Board of Higher Education to "solve the problem" so that the school could open legally, which it did in 1980.

There were other important pioneers in these beginning efforts, such as Dr. Mark Seem in New York and Connecticut, who studied in the French tradition in Canada, Rick Kitaeff in Washington State, who studied in Japan. There were Dr. Peter Eckman, Dr. Leon Hammer, Bryan Manuella and Paul Zmievski in Chicago, and many more. And, of course, there were Asians who were quite instrumental in getting legislation passed, particularly in California—people like Miriam Lee and Miki Shima. Each played a significant role.

A word about Bryan Manuella and Paul Zmievski. In 1978, they started the Midwest Center of Acupuncture in Chicago. In 1980, they created the North American Acupuncture

Association to accredit schools and certify practitioners. Their promotion of the Association for these purposes helped people begin to think about the benefits of accreditation and certification and that an organization was needed for this purpose.

(Note: At that time, very little material was published in English, which included notes from the lectures of Dr. Kim, Dr. So, and J.R. Worsley. Felix Mann had written a small book, and Dianne Connelly published *Traditional Acupuncture: The Law of Five Elements* in 1975. In the late 1970s, a book in English from the Peoples Republic of China titled *Outline of Chinese Medicine* arrived in the United States. In 1983, Ted Kaptchuk published the very influential *The Web That Has No Weaver*, and Dr. So published *The Book of Acupuncture Points* in 1984. Despite these publications, teaching in the U.S. was mainly oral.)

In 1973, Nevada, Maryland, and Oregon were the first states to pass acupuncture laws. Each has its own interesting story.

Nevada: *The Wall Street Journal*, April 17, 1973, reported that the moving force in this area was a semi-retired New York lawyer and real estate developer, Arthur Steinberg, who, along with his wife, had acupuncture treatments in Hong Kong. The treatments improved Steinberg's failing hearing, he says, and cured his wife's migraine headaches.

Steinberg sought to invite his Hong Kong acupuncturist, Professor Lok Yee-kunk, to give demonstrations in Nevada, but the state medical society objected, saying this would be practicing medicine without a license. The society threatened to have the professor put in jail. Steinberg convinced the state legislature to enact a special law authorizing the professor to demonstrate acupuncture without fear of prosecution. Prof. Lok Yee-kunk did these demonstrations from March 19 to April 6, 1973 by holding a "clinic" in a hotel room of the Ormsby House, a casino across the street from the State Capitol in Carson City. Legislators and newsmen received free treatments as did a diverse assortment of other folks. Around 100 people were treated with positive results.

The important fact is that the legislators saw what acupuncture could do. To quote the *Journal*: "Cranford Crawford, a State Assemblyman, says he had chronic sinus congestion. Prof. Lok stuck needles in both sides of his nostrils, in both hands, and in the middle of his forehead. 'It opened up the passages,' Mr. Crawford says, 'and I sleep better at night and my head clears better now. I am 90% cured.' Senate Majority Leader Mahlon Brown had a muscle spasm in a shoulder. He says Prof. Lok put needless there and on the base of his neck and 'I had enormous increase in energy within 24 hours. Within the week all traces of the pain were gone.'"

The legislature immediately passed an act making acupuncture legal in Nevada. It was signed by the governor.

Maryland: This story is quite different. After James Reston's treatment in China broke in the *New York Times* in July, 1971, an enterprising medical doctor, Arnold Benson, recruited acupuncturists in Chinatown and opened clinics for the general community in New York City. He was able to do this for a time, but then the authorities began to arrest the acupuncturists for practicing medicine without a license and for "quackery."

However, Dr. Benson's clinic had acquired quite a following. He convinced the medical board in the District of Columbia to permit him to open a medically supervised acupuncture clinic. He brought in acupuncturists mainly from New York's Chinatown. Busloads of patients came from New York, New Jersey, and other places. He had so much business that he had to recruit additional medical doctors to assist with the supervision. One medical recruit was Dr. Ralph M. Coan, MD, who had just left the military and was looking for employment. Dr. Coan was amazed at the busloads of patients coming to the clinic from out of town. He was even more amazed by the results of the acupuncture. This is important as Dr. Coan, though not an acupuncturist became quite involved with the profession and was one of the organizers of the original American Association of Acupuncture and Oriental Medicine in 1981. (see Endnote)

After a time, some of the acupuncturists began to practice on their own, with several of them locating in Maryland. The Maryland Medical Society was quite concerned. It located a legislator who was quite favorable to its position. In 1973 they recruited a Maryland legislator, Torre Brown, also assistant dean of the Johns Hopkins University Medical School, to introduce legislation, which made acupuncture legal in Maryland if done under medical supervision. However, unlike California at that time, the level of supervision was not defined by the Maryland statute. While the Maryland medical board might have promulgated regulations defining supervision, such as requiring the medical doctor to be actually in the room where the acupuncture was being done, it failed to do so. Also, acupuncture in Maryland did not need to be done as part of university research, which was still required in California in 1973. Thus, when Bob Duggan, Dianne Connelly, and Haig Ignatius, MD, joined by other Worsley graduates, opened the Traditional Acupuncture Institute in Columbia, Maryland in 1975, they were actually quite legal—though the sheriff and some other authorities needed to be convinced of that fact.

Because of the economic success of Dr. Benson, other doctors began to open similar clinics. Washington, D.C. became a mecca for acupuncture; at one time, there were thirteen such clinics. The medical society then prompted the District of Columbia legislature to enact a statute in December, 1974, limiting the practice of medicine to medical doctors and dentists. Dr. Ralph Coan organized a group of patients who called themselves "The Friends of Acupuncture," which sued on behalf of acupuncturists and their patients. In March, 1975, Judge Fred Ugast of the District of Columbia Superior Court enjoined the enforcement of the law. He ruled that the law was unconstitutional on the grounds that it violated the right of a physician to choose the treatment that was best suited for his patient and for the patient to choose the type of health care that he or she believed best. Judge Ugast found that acupuncture helped people, was not harmful, and that only 8 D.C. physicians and no dentists were trained how to do acupuncture, which was not enough for all who wanted treatment in the District of Columbia. This ruling was not appealed and still stands today.

Oregon: The first state to pass a licensing law was Oregon in 1973. As was noted earlier, the National Acupuncture Association, consisting mainly of Steve Rosenblatt, Bill Prensky, Gene Bruno, and David Bresler, gave seminars to MDs throughout the country, including Oregon. One medical doctor who took the seminar was Dr. Joel Sears. An influential Oregon medical doctor, Dr. Sears appeared before the Oregon Medical Board and obtained its support for a law providing for the practice of acupuncture by non-MDs, though under medical supervision. The National Acupuncture Association group that was formed at UCLA was important as consultants in the writing of this law. It was the first law in the nation to provide for the licensing of acupuncturists.

There was one problem: Who were going to be the licensing examiners? At that moment, there were no licensed acupuncturists to take this role anywhere in the United States. Bill Prensky and a Dr. Mifu Shu were named as the first examiners. But first, each of them examined and passed the other. Thus they became the first two persons to be licensed acupuncturists in the United States. Dr. So, Steven Rosenblatt, and Gene Bruno were next. Gene was then immediately appointed to the Oregon Examining Board—even before he moved to Oregon.

By 1981, there was a group of acupuncture and Oriental medicine schools: the New England School of Acupuncture, in Boston, Tristate in New York, the Traditional Acupuncture Institute in Maryland, Midwest in Chicago, Southwest Acupuncture College in Sante Fe, California Acupuncture College, Samra University of Oriental Medicine and Emperors College in Los Angeles, the American College of Traditional Chinese Medicine and San Francisco College of Acupuncture in San Francisco, Oregon College of Oriental Medicine in Portland, and Northwest Institute in Seattle. They were graduating more and more practitioners who were not medical doctors. By then, several states had joined the original three in permitting the legal practice of acupuncture.

It was time for national organizing to begin. The first move in this direction was a meeting in Los Angeles on June 27, 1981. A letter from Ralph Coan, MD and Louis Gasper, PhD

invited people to an organizational meeting of the American Association of Acupuncture and Oriental Medicine. Neither Dr. Coan nor Dr. Gasper practiced acupuncture. (Dr. Coan is an MD who first supervised acupuncturists in the District of Columbia and later worked closely with Dr. Grace Wong, an acupuncturist, in the District of Columbia and then in Maryland. Dr. Gasper, who died in 2004, was a professor at Los Angeles University, where the meeting was held.) The invitation was sent to medical doctors and dentists who used acupuncture and to non-MDs who practiced acupuncture as well as to others who, like Dr. Gasper, had an interest in the area.

Some seventy-five people attended. Some were medical doctors who were practicing acupuncture or otherwise interested in it. Others were non-MD acupuncturists. The first board, elected at the Los Angeles meeting, consisted of seven members, two listed themselves as medical doctors, four were non-MD acupuncturists, and one listed himself as "doctor" without any other designation. The first president was Dr. Lupo Carlota, MD. Robert Sohn, PhD was named vice president.

This meeting brought together three distinct groups. First, and probably the largest at that meeting, were the MDs and dentists who had received some acupuncture education in the various weekend lecture series but whose main vocation by and large was medical and dental practice. They were mostly interested in using acupuncture as an anesthesia. The second was a group of MDs who did not call themselves practitioners of acupuncture. They employed acupuncturists, mainly Asians, and nominally supervised them. The last group consisted of AOM practitioners who had more extensive education than just from the weekend lectures and who were trying to make AOM their principal vocation. While Dr. Gasper, Dr. Coan, and Dr. Carlota tried hard to bring these three groups together in one tent, there were seeds of discord.

The second national gathering was in October, 1981, in Inner Harbor, Baltimore, Maryland, and was sponsored by the Traditional Acupuncture Foundation (started by Bob Duggan as an adjunct of the Traditional Acupuncture Institute). This was an academic-type meeting, concentrating on substance. Some 400 people attended, including many of the people who were emerging as leaders in this new profession as well as representatives of many of the schools, all young, freestanding, and relatively weak. There was much "corridor conversation," including agreement among many that an organization of schools should be formed. The decision was made to extend the weekend conference into Monday morning for those interested in talking more about the profession; as many as 125 people attended this meeting.

A decision was made for the schools to meet in February, 1982, at the Midwest Acupuncture School in Chicago. Invitations were extended to all known schools, and a significant number of them sent representatives to this meeting. This resulted in the organization of the National Association of Schools of Acupuncture (now known as the Council of Colleges of Acupuncture and Oriental Medicine) and a decision was made to create both a commission to accredit schools as well as a separate commission to certify acupuncturists. Task forces were appointed to organize each of those commissions.

Some disagreement surfaced at this Chicago meeting. Some believed that the education should be taught at the doctorate level and that graduates should be given doctorate degrees. Others argued that this would create the same type of regimentation and conformity that was typified by the American Medical Association, against which this new profession was rebelling. Mark Seem argued in favor of training independent "barefoot doctors of acupuncture," modeled after the China of old. Neither of these positions was accepted, leaving the issue unclear in the minds of some.

There was also discussion about the AAAOM and its upcoming second "organizational meeting," which was scheduled for the next month, March, 1982, at the Del Coronado Hotel in San Diego. Those meeting in Chicago decided that as many AOM practitioners as possible should attend the San Diego meeting and participate fully, with the intent of ultimately taking over the organization from the medical doctors and dentists.

The March, 1982, "organizational meeting" of the AAAOM in San Diego had higher attendance than the June meeting held prior in Los Angeles. A new board was elected consisting of five medical doctors and six non-MD acupuncture practitioners. Lupo T. Carlota, MD was renamed president. Dr. Robert C. Sohn and Dr. Harry Tam, each an acupuncturist, were elected as vice presidents. By-laws were tentative, with a resolve that they would be finalized before the next meeting. Tension between the MD acupuncturists and the non-M.D. practitioners surfaced without resolution.

The Accreditation Commission, created as a result of the Chicago meeting, met for the first time in early 1983 in Columbia, Maryland. It consisted of five representatives of schools and two public members: Robert Mulligan, SJ, assistant to the president of St. Louis University and former university president, and myself. The chair of this initial meeting was John Myerson, then-president of the New England School of Acupuncture. Unfortunately, an upheaval occurred at NESA shortly thereafter, and John could no longer serve as the institutional representative from NESA and had to resign. At that point, I became chair of the Commission.

The National Certification Commission was to be a joint creation of the National Association of Schools and of the AAAOM. Each organization was to appoint four members, and the eight were then to appoint a ninth. The National Association of Schools acted rather quickly; the AAAOM dragged its feet. It is clear from the correspondence that the medical doctor members of the AAAOM board, led by President Dr. Carlota, wanted to delay the Certification Commission as long as possible. The tension became quite heated between those who—as was put forth in one communication from Robert Sohn—were using acupuncture as their principal vocation and the others, i.e., the medical doctors, for whom it was only a sideline. Dr. Carlota refused to call a meeting of the AAAOM board to resolve the issue. An attempt by Bob Sohn to have the matter voted on by mail failed when there were objections to its legality. All of this led to the third meeting of the AAAOM at the Shoreham Hotel in Washington, D.C. in May, 1983.

The Traditional Acupuncture Foundation, which had been so successful with its first academic conference in October, 1981, scheduled another academic conference for the two days prior to the AAAOM meeting at the same hotel. Dr. Carlota scheduled a board meeting of the AAAOM in the middle of the TAF conference when some of the non-MD members of the AAAOM board members could not attend. After a round of protests, the AAAOM board meeting was rescheduled for a later time that same day. The meeting elected the four AAAOM members of the Certification Commission—all of them non-MD practitioners of AOM.

The result of this board meeting was the resignation and walkout of all of the MD members except for Ralph Coan. The split became complete; Dr. Coan was elected as the new president of the AAAOM. The Certification Commission then organized and named Stuart Kutchins as its first chair. The first certification examination was administered in March, 1985. Over 300 people took the examination. There were also about 500 applications for examination by credentials—a form of grandfathering, which came to a close on June 30, 1985.

The organization of the profession was well under way, but all was not easy. *The American Acupuncturist*, April, 1985, reported that in the preceding year acupuncturists were indicted—charged with the crime of practicing medicine without a license—in Alabama, Illinois, Missouri, New Hampshire, Vermont, and Wisconsin.

Another example of these difficulties was a book published by the United states Government on May 31, 1984, titled *Quakery: A $10 Billion Dollar Scandal,* which stated (p. 47) in capital letters: "ACUPUNCTURE IS QUACKERY." Congressman Pepper, the chair of the committee that issued that book, introduced a bill in Congress to outlaw all quackery. After some good lobby work by the AAAOM, through its then-legislative chair, Dr. Ralph Coan, Congressman Pepper retracted that statement in a letter dated February 5, 1985. (*American Acupuncturist*, Vol. IV, Issue 4, December, 1986. p.2)

Congressman Pepper played another role in the development of acupuncture in the United States. He stood in the well of the United States House of Representatives and held up a diploma he had just received that gave him his doctorate in AOM. The requirements, he stated, were to write six one-page book reviews on six books he had read at some point in his life and pay $1,000. He denounced this as a fraud upon the people who were beguiled into paying the $1,000. The doctorate was issued by one of our early schools.

Now let us move to May, 1985. The Accreditation Commission was faced with grave difficulty. Accreditation agencies must themselves be accredited—the technical term is "recognized." The most important person to recognize an accreditation agency is the United States Secretary of Education. For the students of a school to be entitled to federally guaranteed student loans, the school must be accredited by an agency that is recognized by the Secretary of Education. As we found out, this is a long and arduous road.

We filed one extensive application in 1984 and were turned away. The problem was that we had not really defined ourselves and sought recognition for all the types of education—from bachelors through doctorate—that we might give some day. The profession needed to define itself. When the AAAOM met in the Oak Park area of Chicago in May, 1985, the accreditation commission called a meeting that included the members of the accreditation commission, the certification commission, the association of schools, and the officers of the AAAOM. I chaired that meeting and stated that I was the one person in the room who did not care what the result would be, but that we had to have a result. We decided that we would not adjourn until we had arrived at an agreement we could live with.

To facilitate this process, I suggested that we start with these questions: What is it that a qualified, entry level practitioner should look like? Should this person have the same amount of education and clinical training as a medical doctor? How much didactic education and clinical training was necessary for a qualified, entry level practitioner to have? We decided on three academic years if it was for acupuncture alone and four academic years if it was to include both acupuncture and herbs. The next question was about the educational level of applicants. Some schools admitted people right out of high school; others required a college degree. It was decided that the entering student should have at least two years of post-secondary education.

The next question was what kind of degree was to be awarded. Here, I must admit, I had a view. With the schools all being free-standing, relatively new, and with no research activity or other scholarship by faculty or students to speak of, it would be very difficult to sell a doctorate level recognition to the Department of Education or to the states. Most states thought of acupuncture as a trade, not as a profession. Moreover, the incident with Congressman Pepper's fraudulent doctorate had just occurred and was in the newspapers. Therefore it was decided that, following the example of some other professions, we would award a professional master's degree—a Master's of Acupuncture for those who were trained only in acupuncture and a Master's in Oriental Medicine for those who were trained in herbs as well. We accomplished all of this in one long day.

The next day I reported these decisions to the assembly of the AAAOM, where many participants wanted immediate doctorates, as many still do. I explained the reasoning behind our decisions, and I made the prediction that the schools would be in a position to consider seriously a doctorate program in the early part of the 21st century.

This is where the profession is now. The accreditation commission was recognized by the Secretary of Education in 1988. There are now approximately 27,000 licensed practitioners in the U.S. The highly respected Certification Commission is recognized. Some serious research is going on in some of the AOM schools, in many medical schools, and is encouraged by the Society for Acupuncture Research. Peer review journals report on serious acupuncture research. There are now fifty-eight accreditation master's programs, with six more in candidacy. And there are three accredited and four candidate Doctor of Acupuncture & Oriental Medicine programs. Accredited and candidate for accreditation

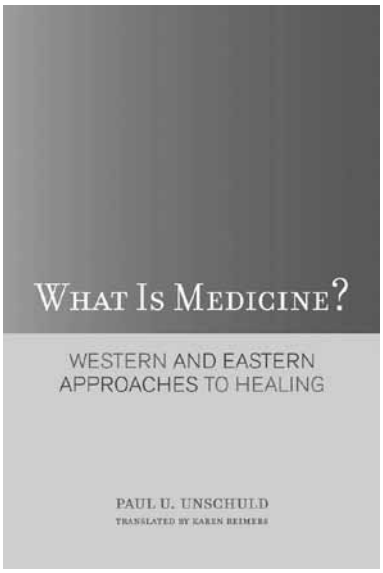
continued on page 29

Book Review: *What Is Medicine? Western and Eastern Approaches to Healing* By Paul U. Unschuld

Reviewed by William R. Morris, PhD, DAOM, LAc

Key Words: medical history, medical epistemology, Chinese medicine

What Is Medicine? Western and Eastern Approaches to Healing by Paul U. Unschuld
Berkeley, CA: University of California Press
September 2009
ISBN: 9780520257665
Paperback, 256 pages
$24.95



A sociologist by training, Paul U. Unschuld has expanded his professional roles to that of sinologist and historian. Currently professor and director of the Horst-Goertz Institute for the Theory, History, and Ethics of Chinese Life Sciences, Charité Medical University-Berlin, Unschuld has authored many influential works on Chinese medical history such as *Medicine in China: A History of Pharmaceutics and Huang Di Nei Jing Wen: Nature, Knowledge, Imagery in and Ancient Chinese Medical Text,* both from UC Press. His works on the *Nei Jing* and the *Nan Jing* have influenced a generation of Chinese medical scholars in the West. His sociology background and role as a medical historian in the German University system prepare him well to explore the question: "What is medicine?"

As a sociologist, Unschuld presents a constructivist point of view which assumes that people build their knowledge of reality from the interaction of their experience and their ideas—and for Unschuld, medicine is no different. For him, new practices in medicine are built from the beliefs of the social system in which a medical practice takes place.

In this work, Unschuld distinguishes medicine from noumanistic and spiritualistic healing practices and compares and contrasts medical scientific beliefs from the East and West in a historical triptych stretching back 2,000 years. In essence, Unschuld has created a *tour de force* that explores Eastern and Western medical practices, their history, and social construction. Therefore, one might read this book if seeking knowledge about medical history in the East and West and also to understand thinking processes in medical practice. This book works through medical anthropology as much as it does history and epistemology.

In ancient Greece and China, physicians observed the fact that people healed by themselves. Natural healing is only discussed for the Chinese in the *Treatise on Damage by Cold (Shang Han Lun)*. According to Unschuld, the Chinese literature shows no discussion about spontaneous healings. However, in ancient Greece, these notions of self-cure have existed for 2,000 years up to today. The external physician is necessary only if the inborn physician didn't work, and the physician was to observe and intervene only if necessary: *Natura Zanat Medica Cura.*

Unschuld suggests that medicine is the attempt to understand and manipulate disease on the basis of science i.e., the development of science is a sole prerequisite to the development of medicine. What is science? He contends that it is the assumption that there are natural laws acting independently of person, time, or place, and that humans can recognize these laws. Unschuld believes that understanding these laws is sufficient to understand the universe and human existence in it, and that the development of medicine requires this set of assumptions. That is, science is the prerequisite to the development of medicine.

The basic questions that Unschuld pursues beyond "What is medicine?" are: Why do new thoughts emerge? Why are they adopted? And why are they convincing? How will people consider the concept 100 years from now?

In terms of politics, the Chinese world view that set the stage for the development and flourishing of medicine in China during the Han Dynasty (c. 001 CE) says that the images are in part connected to the efforts of the great unification that took place after the Warring States period. Thus, Chinese medicine as we know it emerged in a unified empire whereas Western medicine developed in the Greek political environment that valued local and individualized government. In terms of process and relations, then, the tendency of Western medicine to explore objects in detail took place in distinction from the Chinese tendency to look at the whole.

Unschuld discusses China, where Confucianism, Legalism, and Taoism formed the three socio-political currents that affected thoughts and beliefs about medical practice. These are critical to understanding the medical practices of the era. Confucians state that man is basically "good-natured" and that this goodness needs to be reinforced through education, musical training, and behaviors appropriate to class with its rights and rules. If everyone behaves appropriate to class, there should be no problem. The emphasis was on strict sets of social norms for every social activity. Daoist philosopher Chuan Zi provided the basis for 2,000 years of imperial philosophy rooted in Confucian legalism. The movement emphasized control over man using strict laws rather than emphasizing good behavior. They did, however, promote education on a high order. Taoists emphasized ignoring rights, laws, and education, as they are all manmade, placing constraint on the people. Men will react, and this is why we have this mess. They said let's look at nature—we don't need laws, rules, and punishment. No manmade morality or laws.

Contrary to these three unifying threads in China, Greece sought to shut out monarchal rule. According to Unschuld, it was this very distinction in the sociopolitical climate between early Greece, the polis and the unified state of China the provided the metaphorical backdrop to the development of the medical worldviews. Part of Chinese society arrived at the belief in the necessity of social law, and the Greeks were focusing on the rights of the individual. In Greece the social dimension of law was established first, then natural law. Later, the in the Tang Dynasty, Chinese culture presented a complex pluralistic life compared to the simple depressed nature of European life in the Middle Ages.

Unschuld relates the story of Emperor Tian Chi Huangdi who conquered regions that used different writing, weights, and cart track sizes. Within ten years he unified measures thereby increasing commerce. The flow of goods, people, and money were served by the

standardization. This is why the government established *Zang*—the depots to store grains. Here we see the importance of *zang* and other terms. This example is a projection of the concept of circulation, a notion that was not able to be proved in China 2000 years ago, but this is what we see today, for example, in our understanding of the circulation of blood.

What Is Medicine? Western and Eastern Approaches to Healing provides a refined reading experience. Unschuld's abilities in English, German and Chinese allow for a level of both depth and clarity in his writing style. In essence, he has created a work that is useful for both medical history and epistemology. His detailed account of the progression of European medical thought in comparison the development of Chinese medical thought is a must read for those who would explore medical history as it pertains to practice. This book could well be a resource in medical history courses.

William Morris, PhD, DAOM, LAc stepped down from the presidency of the AAOM in order to facilitate the unification of the national professional association as the AAAOM. A renowned expert on Chinese pulse diagnosis, he co-authored *Li Shi-zhen Pulse Studies: An Illustrated Guide*. Classics and family lineages provide the foundation for his 30-year focus on the subject of pulse diagnosis. With 20 years of experience teaching pulse diagnosis and a master's degree in medical education from the University of Southern California, Morris has developed a system of practice that weaves the six channel and Eight Extraordinary Vessel pulse methods presented in the Pulse Classic. Morris serves as the president and CEO of the Academy of Oriental Medicine at Austin, Graduate School of Integrative Medicine. (www.aoma.edu).

Pet Acupuncture continued from page 21

References

1 Barnes PM, Powell-Griner E, McFann K, Nahin RL. Complementary and alternative medicine use among adults: United States, 2002. Hyattsville (MD): National Center for Health Statistics. 2004

2 Barnes PM, Bloom B, Nahin RL. Complementary and alternative medicine use among adults and children: United States, 2007. Hyattsville (MD): National Center for Health Statistics. 2008.

3 Eisenberg DM, Davis RB, Ettner SL, Appel S, et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. *JAMA* 1998 280:1569-75.

4 Ni H, Simile C, Hardy AM. Utilization of complementary and alternative medicine by United States adults: results from the 1999 national health interview survey. *Med Care* 2002 40:353-8.

5 Tindle HA, Davis RB, Phillips RS, Eisenberg DM. Trends in the use of complementary and alternative medicine by US adults: 1997-2002. *Altern Ther Health Med* 2005 11:42-9.

6 Op. cit. Barnes PM, Powell-Griner E, McFann K, Nahin RL, 2004.

7 Op. cit. Barnes PM, Bloom B, Nahin RL, 2008.

8 Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. Unconventional medicine in the United States: prevalence, costs, and patterns of use. *N Engl J Med.* 1993 Jan. 28; 328 (Suppl 4):246-52.

9 Nahin RL, Barnes PM, Stussman BJ, Bloom B. Costs of complementary and alternative medicine (CAM) and frequency of visits to CAM practitioners: United States, 2007. Hyattsville (MD): National Center for Health Statistics. 2009.

10 Manheimer E, White A, Berman B, Forys K, Ernst E. Meta-analysis: Acupuncture for low back pain. *Ann Intern Med.* 2005; 142 (Suppl 8):651-63.

11 Kwon YD, Pittler MH, Ernst E. Acupuncture for peripheral joint osteoarthritis: A systematic review and meta-analysis. *Rheumatology* (Oxford). 2006 Nov; 45(Suppl 11):1331-7.

12 Ezzo JM, Richardson MA, Vickers A, Allen C, Dibble SL, Issell BF, et al. Acupuncture-point stimulation for chemotherapy-induced nausea or vomiting. Cochrane Database Syst Rev. (2):CD002285.2007.

13 AAHA. Pet Care, Complementary Medicine. Available from:

http://www.healthypet.com/PetCare/PetCareArticle.aspx?art_key=4912c7bd-7f07-4bd2-8376-0e72eaf1ae3c

14 Lana SE, Kogan LR, Crump KA, Graham JT, Robinson NG. The use of complementary and alternative therapies in dogs and cats with cancer. *JAAHA*. 2006; 42:361-365.

15 Gregory CR, Gourley IM, Kochin EJ, Broaddus TW. Renal transplantation for treatment of end-stage renal failure in cats. *J Am Vet Med Assoc.* 1992; 201:285-291.

16 Woo S, Krzyzanski W, Jusko W. Pharmacodynamic model for chemotherapy-induced anemia in rats. *Cancer Chemother Pharmocol.* 2008 June; 62(Suppl 1):123-33.

17 Nelson GD. A brief history of cardiac pacing. *Tex Heart Inst J.* 1993; 20(Suppl 1):12-18.

18 Buchanan JW. First pacemaker in a dog: a historical note. *J Vet Intern Med.* 2003 Sept-Oct; 17(Suppl 5):713-4.

19 Burke A, Upchurch D, Dye C, Chyu L. Acupuncture use in the United States: findings from the National Health Interview Survey. *J Altern Complement Med.* 2006 Sep; 12(Suppl 7):639-48.

20 Op. cit.Tindle HA, Davis RB, Phillips RS, Eisenberg DM, 2005.

21 Albert A, Bulcroft K. Pets, Families and the Life Course. *J Marriage Fam.* 1988; 50:543-52.

22 Op. cit. Barnes PM, Powell-Griner E, McFann K, Nahin RL, 2004.

23 Op. cit. Barnes PM, Bloom B, Nahin RL, 2008..

24 Burke A, Upchurch D, Dye C, Chyu L. Acupuncture use in the United States: findings from the National Health Interview Survey. *J Altern Complement Med.* 2006 Sep; 12(Suppl 7):639-48.

25 Op. cit. Barnes PM, Powell-Griner E, McFann K, Nahin RL, 2004.

26 Op. cit. Barnes PM, Bloom B, Nahin RL, 2008.

27 Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Rompay MB, et al. Op. cit.

28 Op. cit. Burke A, Upchurch D, Dye C, Chyu L, 2006.

29 Freeman LM, Abood SK, Fascetti AJ, Fleeman LM, Michel KE, Laflamme DP, et al. Disease prevalence among dogs and cats in the United States and Australia and proportions of dogs and cats that receive therapeutic diets or dietary supplements. *J Am Vet Med Assoc.* 2006 Aug 15; 229(Suppl 4):531-4.

30 Op. cit. Lana SE, Kogan LR, Crump KA, Graham JT, Robinson NG, 2006.

31 Grzywacz JG, Lang W, Suerken C, Quandt SA, Bell RA, Arcury TA. Age, race, and ethnicity in the use of complementary and alternative medicine for health self-management: Evidence from the 2002 National Health Interview Survey. *J Aging Health.* 2005; 17:547-572.

32 American Pet Products Association. Pet Owner Spending Remains Steady in a 'Ruff' Economy. March 24, 2009. Available from: http://appma.typepad.com/pet_industry_insight/2009/03/pet-owner-spending-remains-steady-in-a-ruff-economy.html

33 Op. cit.Tindle HA, Davis RB, Phillips RS, Eisenberg DM, 2005.

34 Op. cit. Barnes PM, Powell-Griner E, McFann K, Nahin RL, 2004.

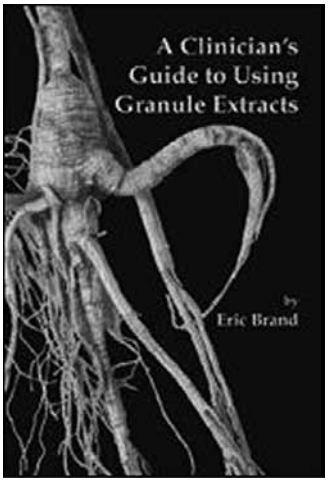
35 NIH Consensus development panel on acupuncture. NIH Consensus Statement. *JAMA* 1998; 280(17):1518-1524.

Ella Woods, DAOM is founder and clinician at Acupuncture Works in Pacifica, California, and holistic clinician at San Francisco Veterinary Specialists, San Francisco, California. She holds master's and doctoral degrees in acupuncture and Oriental medicine from American College of Traditional Chinese Medicine, San Francisco, California, and a master's degree in business administration from San Francisco State University. She is deeply interested in the human-animal bond and the health effects that bond has on both species.

Adam Burke, PhD, MPH, LAc is a professor of health education and director of the Institute for Holistic Health Studies at San Francisco State University. He holds advanced degrees in social psychology and health education from the University of California and is a licensed acupuncturist. Research activities include curricular innovation in the area of holistic health education, cross-cultural studies of traditional medicine, and inquiries into meditation and imagery. In 2010 Dr. Burke was appointed by Kathleen Sebelius, Secretary of Health and Human Services, to a three-year term as an Advisory Council member of the NIH's National Center for Complementary and Alternative Medicine (NCCAM).

Katrina J. Rodzon, MA is a graduate student in the Experimental and Applied Psychological Science program at Utah State University, with an emphasis in cognition, brain and behavior. She holds a master's degree in psychological research from San Francisco State University emphasizing the influence of subjective experience on behavior. Her current research is centered around numerical cognition and behavior, specifically the role of emotion on temporal perception and enumeration as well the influence of attention and working memory on impulsive behavior.

Book Review: *A Clinician's Guide to Using Granule Extracts* By Eric Brand, LAc



Reviewed by Julie Chambers, LAc

Blue Poppy Press, Boulder, CO
2010
241 pp.
ISBN: 1-891845-51-9
$29.95

Key Words: granule extracts, Chinese herbal practice, dosing guidelines, formula combining, global manufacturing trends

This modest text of 241 pages successfully demystifies the complex world of granule extracts in Chinese herbal practice while revealing just how baffling the practice can still be for American practitioners. Any practitioner wanting to learn granule prescribing will find far more detailed information here than is usually provided by manufacturers.

In his extensive travels, Eric Brand, LAc has visited manufacturing facilities in Japan, Taiwan, mainland China, and Korea to report in detail the vast variation in global practices. He begins with an explanation of exactly what granule extracts are, how they are made, what kind of excipients, or "fillers," are used in their manufacture, and why. If, for example, a very fine, smoothly-flowing product is desired in markets where the user eats the powder directly, starch is used. If the powder is to be mixed in water to form a drinkable liquid, dextrin is used. Brand explains the difference between a manufacturer assessing the strength and purity of its product by testing for marker chemicals (such as the percentage of ginsenosides in a finished ginseng extract) versus full-spectrum products that contain all the active ingredients as well as unknown ingredients that are found in the source material. These are fascinating discussions for practitioners who wish to understand how granule products are made.

The extraction process is fully described, including the differences in amounts of water, temperature, and duration of extraction to yield an ideal extract. While many substances are extracted to a 5:1 concentration, there are reasons for variation in the ratio of concentration. For example, gelatins, such as *e jiao* (Asini Corii Colla) and *lu jiao jiao* (Gelatinum Cornu Cervi), are not traditionally decocted and are actually already concentrated, so they cannot be further concentrated. All these considerations affect how the practitioner will make dosing decisions.

Several interesting points are made about the labeling and dosing practices among manufacturers. Suppliers do not always disclose the quantity of excipient in a concentrated product, and this can affect dosing. Many products labeled as 5:1 concentrations cannot achieve 5:1 but only 3:1. For example, sticky and rich substances such as *dang gui* (Radix Angelicae Sinensis) and *da zao* (Fructus Jujubae) are difficult to concentrate at levels higher than 3:1. Brand provides several lists of items that practitioners should assess individually due to these conditions. Further, some suppliers state that all their products are concentrated to 5:1 even if they are not. Thus practitioners should not rely on manufacturers' dosing guidelines since "it is common for suppliers to list a very low dose on the bottle, because this practice makes the bottle appear to contain more servings and thus offer better value." Such statements do not appear to be criticisms of the granule industry but rather useful cautions to the practitioner to look beyond the product label.

Brand further states that "school clinics teach students to prescribe granules as though they were at a 5:1 concentration, without ever investigating whether the products used are actually 5:1." In fact, he asserts that Taiwanese products are by far the most common source of granules in the U.S., and those products range from 3:1 to 5:1 concentrations.

Practitioners need not despair because in a very useful chapter of the book, "Dosing Guidelines for Granule Products," several tables show how typical raw doses of individual herbs in a formula can be converted to their appropriate granule doses. Such variables as "mild by weight" or "potent by weight" are incorporated in individual herbs. For example, *fu ling* (Sclerotium Poriae Cocos) is mild by weight, whereas *chen pi* (Pericarpium Citri Reticulatae) is potent by weight. Other tables show how to convert raw to granule doses when some ingredients in the formula are concentrated to differing ratios. The examples are easy to follow.

Several interesting practices are discussed, where, in Taiwan, national health insurance covers only granule formulas, and this insurance dictates how many grams per day can be prescribed. Nowhere in the world are granules used more extensively, so these prescribing and dosing practices are well worth studying. It is a common practice in Taiwan for practitioners to use whole formulas as modules in a prescription. Ten detailed case studies are provided that show how whole formulas were combined along with the addition of some single herbs.

Following a detailed section on the art of formula combining, the author presents a practical guide to setting up a granule pharmacy, giving a step-by-step procedure by which practitioners can test the quality and strength of several brands of the same item. From smelling to dissolving in water, looking at the sediment, and, finally, tasting the liquid, this process will help users compare one product to another.

The last major section of the book, comprising about 50 pages, presents commonly used formulas and single herbs for selected conditions. Compared to the detailed and practical chapters that precede, this section is less valuable mainly because the matching of formulas to conditions is basic and generic and does not consider individual presentations.

There are some editing oversights in the book which make the reading somewhat vexing. Terms such as "Japanese Kampo medicine" are neither defined in the text nor found in the glossary. Also, the glossary is not alphabetized. There are obvious copy editing mistakes that occur throughout the text, although this does not detract from the overall usefulness of the book.

Eric Brand, LAc states with honesty and humility that a "small introductory book such as this one" is just a beginning and that a true understanding of granules is not yet a "global reality." This book does provide a well-researched foundation for clinicians who wish to deepen their practical knowledge of this form of herbal medicine.

Julie Chambers, LAc has been in private practice in Santa Monica as a licensed acupuncturist and herbalist since 1997. She is also on the faculty at Yo San University of Traditional Chinese Medicine in Los Angeles, where she is chair of the Herbal Medicine department and teaches herbal pharmacopoeia. Email: info@juliechamberslac.com

AAAOM-Student Organization (SO) **Update**

2011 Conference

With the annual AAAOM conference just around the corner, it brings me great pleasure to announce the introduction of the first-ever Student Research Symposium. During the conference, students from across the country will have the opportunity to share what they have learned about acupuncture research and integrative medicine. These presentations will be made to acupuncture professionals and their peers in an effort to provide a unique educational experience. Please show your support for your peers and participate in this event.

2011-2012 AAAOM Student Organization Elections:

The student organization is looking for dedicated professional students to join our team. We are currently accepting applications for the 2011-2012 AAAOM student organization positions. The position openings include vice president, secretary, treasurer, and membership director. Prospective applicants should submit a self-nomination form and a resume with their application. Please check for updates and more information on our website: (www.aaaomonline.org).

AAAOM Student Organization Chapter Updates:

Here is an update from our Southwest Acupuncture College chapter. If you would like to provide an update for your school in our next issue, please feel free to contact AAAOM via e-mail or phone for more information: dnewton@aaaomonline.org or 866-455-7999.

Thank You.
Steve Carrasco, AAAOM-SO Vice President

A Wider World: The AAAOM Southwest Acupuncture College-Boulder Student Organization

I first discovered the AAAOM at the 2010 conference in Albuquerque, NM, amidst the panorama of desert sunsets while sitting around the fire and meeting students from all over the country. It was a wonderful discovery to meet professionals and students who are continuing to grow and learn in the field, deeply caring about their profession, and meeting the challenges of growing a guest medicine in an allopathic world. I came back to Boulder brimming with enthusiasm, eager to contribute to my new profession from the larger perspective of being involved with the profession of Oriental medicine through the AAAOM.

Finding like-minded students who have been willing to contribute their time and talents to growing the AAAOM Student Organization in Boulder has been easy and has shown me the creativity and talent that our student body contributes to the overall betterment of the profession.

In building our student chapter we have had successful fundraising events, including our fall yard sale and the establishment of our mailbox store "Dangles, Bangles & Yarn, Oh My!" where we sell jewelry and knitted items to raise funds for students to attend the AAAOM conference.

Overall, the Boulder student body has shown an interest and support of the AAAOM-SO by donating items for the yard sale, purchasing handmade items from our store, and expressing increased interest to become more involved. Our first yard sale was met with such enthusiasm and generosity from students and staff! We were all excited to be a part of our first event, hanging out with everyone in the side yard, eating homemade muffins and cookies. Michelle LaPointe, Anne Devereux, and Emily Herbst have contributed their ideas, work, and talent to the fundraising events, building our chapter and their commitment as board members. Without them we wouldn't have the beginnings of a successful AAAOM student organization.

Having started our chapter in April, 2010, we are planning to meet our mission of expanding awareness to the public about acupuncture and to create a foundation for our school chapter that will continue beyond our time in school.

Being a part of AAAOM has shown me that there is so much to do and so many opportunities to expand and continually increase awareness of acupuncture and Chinese medicine in this country. To be a part of this exciting world of change is a gift.

I hope that our AAAOM SWAC-Boulder SO chapter will serve to increase awareness of what being a part of the profession of Oriental medicine entails beyond school. A pebble thrown into the pond sends its ripples to the wider world.

Respectfully Submitted,
Brenda Scott
President, AAAOM-SO SWAC-Boulder

Acupuncture 1965-1985 continued from page 25

schools are now located in twenty-one states. Acupuncture is now legal in forty-five states. An entry level doctorate is now being seriously considered. This profession of approximately 27,000 licensed practitioners is well organized and recognized. It has come a long way in a relatively short time.

Endnote:

Organizational names changed; the first organization in the AOM field was the National Acupuncture Association, formed by Bill Prensky, Steve Rosenblatt, and Louie Prince in 1972. (See Part 1 of this article in Vol. 54.) In 1981, under the leadership of Ralph Coan, MD and Louis Gasper, PhD the American Association of Acupuncture and Oriental Medicine was formed. At first, this AAAOM was controlled largely by medical doctors and dentists. It was taken over in May, 1983, by AOM practitioners who were not MDs or DDSs. In 1993 this organization split apart into the National Acupuncture and Oriental Medicine Alliance and the American Association of Oriental Medicine. On February 1, 2007, these two organizations were reunited, and its name again became the American Association of Acupuncture and Oriental Medicine.

Sherman Cohn, professor of law at Georgetown University, has worked on behalf of the AOM field since its regulatory inception in the late 1970s. He has served as chair of the Accreditation Commission of Acupuncture and Oriental Medicine and as a board member of the former National Acupuncture Alliance. He is an active board member for the Integrated Healthcare Policy Consortium, president of the National Acupuncture Foundation, and chair of the board of the Tai Sophia Institute (formerly known as the Traditional Acupuncture Institute) in Maryland. He has also served as chair of the board of the Tai Hsuan College of Acupuncture and Herbal Medicine in Hawaii.

Author's Note: As this is a work in progress, the reader who has any information concerning these matters is asked to submit it to the author. It may be that your recollection of one or more of these incidents is different than what is in this article. If you have any paper records of any of these matters, that would be very helpful. Thank you for your help. cohn@law.georgetown.edu

AAAOM Conference Abstracts

AAAOM has, for the first time, evaluated and accepted a number of research abstracts that will be presented at the May, 2011, conference, Whole Medicine: Teaming Up for Our Patients. These differ from other abstracts in that many include research data that has been collected but not yet presented in a published paper. They will be presented at the conference either in oral presentations or as research posters for general viewing.

IMPORTÃNCIA DO TRABALHO CONJUNTO ENTRE MÉDICOS E ACUPUNCTURISTAS

Barbosa dos santos C, CEATA

The usefulness of the concordance between the Eastern and Western medicine can also be economically feasible, measurable, and monitored. Access to such practices through the public health system reduces the high costs of outpatient services maintained by the government and expand the new hires. These are some reasons for studies such as this to deepen the understanding of alternative therapies that, as a precautionary measure or associated with the resources of Western medicine, contribute to the maintenance of population health and reduce public spending.

Who Comes Back? A Comparison of Patients Who Came for Only One Visit and Those Who Came for at Least Five Visits

Cooper F, Oregon College of Oriental Medicine

The purpose was to determine if there were demographic and symptomatic differences between patients who visited the OCOM clinic for only one visit and those who visited at least five times. This chart review involved 32 randomly chosen patients who came to the OCOM clinic only one time during the spring and summer quarters of the 2008 school year. This group was compared to 39 randomly chosen patients who came for at least five treatments and started during the same time period. The two groups were remarkably similar on most variables used to compare them, with age being the biggest difference. The mean age of patients who came only one time was 39.5 years while the mean age of the group that came at least five times was 52.4 years. Among the group who came at least five times, patients 55 years or older were more likely to come more often than those under 55. Another suggestive difference was in the number of patients who traveled 20 or more miles for their treatments. Six of the 32 patients who came for only one visit lived 20 or more miles from OCOM while only two of the 39 patients who came for at least five treatments lived at least 20 miles from OCOM. In the group that came for only one treatment, a significantly smaller percentage (39%) took some form of supplement (herbal, OTC, vitamin) than in the group that came for at least five treatments (59%).

Successful Treatment of 13 Patients with Postherpetic Neuralgia Using the Acupuncture Dermatome Treatment

Stone J, Indiana University School of Medicine

Objectives: Post herpetic neuralgia (PHN) is a painful complication of the varicella zoster (shingles) virus, which occurs in older and immunocompromised patients. Though a variety of both traditional Eastern and Western allopathic therapies have been advocated, they have little effect in relieving the pain. Patients/Methods: This retrospective analysis discusses the successful treatment of 13 patients suffering from PHN. Patients were treated by a single practitioner trained in traditional Chinese medicine (TCM) in a community hospital pain clinic. Acupuncture needling along the effected dermatome, a modified TCM "surround the dragon" technique, was preformed. Acupuncture therapy occurred twice weekly for 1 to 2 weeks, then less frequently as pain and medication was reduced. **Results:** Patients received a median of 7 treatments (range 4-11). Median baseline allodynia levels were reduced from 7/10 (range 5 to 9) to zero (range 0 to 6), intermittent shooting pain from 9/10 (range 7 to 10) to 1/10 (range 0 to 6). 7 of 10 patients (70%) were able to be weaned off all pain medications by the end of the treatments. **Conclusion**: This data supports the use of the acupuncture dermatome treatment for patients suffering from PHN. It shows efficacy in reducing PHN pain during narcotic and anti-seizure medication decrease, and has lasting effects.

Bridging Traditional Chinese Medicine Diagnosis and Nutritional Evaluation in Western Medicine - A Dynamic Approach to Health

Lopez de Vaughan R, Kamininski M, Wang X, Successful Longevity Clinic

The thesis describes a synergistic method for transdisciplinary integration of traditional Chinese medicine and functional medicine. When this method is applied, the esoteric principles of Chinese medicine bring the art back into Western medicine and are complemented by the scientific methods of functional medicine. This then provides both paradigms a common and statistically verifiable basis for communication. We have used Optimal Nutrition Evaluation (ONETM) and Comprehensive Nutritional Evaluation (NutrEvalTM) results (urine and plasma) collected over a two-year period and correlated with traditional Chinese medicine differential diagnostic patterns and attributes collected using the four examinations. Both paradigms are in agreement regarding the three causative factors for disease—genetic, environmental, and spiritual/emotional. However, at the present time in functional medicine (Western medicine), there is not an integrated approach to spiritual/emotional imbalance. Chinese medicine in its present incarnation has four branches: acupuncture, massage, internal medicine (herbs, nutrition), and Qigong (meditation, breathing exercise and physical movement). These intimately connected branches provide thousands of years of clinical experience and share an integrated differential diagnosis method. This method relates to imbalance pertaining to organ and channel balance, a major component of which is spiritual/emotional. By the same token Qigong exercise, acupuncture, massage, and herbal supplements can be utilized, but if the body is missing an essential mineral, vitamin, essential fat or protein, healthy balance will not be achieved. Patterns of imbalance not obvious by use of the four examinations can be revealed through ONETM and NutrEvalTM testing prior to producing physical disease manifestation. By combining the two modalities, true health and balance can be restored to each organism.

Integrative Treatment for Breast Cancer—Clinical Case Study

Zhao RJ, The Center for Traditional Chinese Medicine, Inc.

This article is focused on real clinical case presentation and study. Eight cases are classified into three categories, i.e., treated with single TCM technique, cases treated with combination modalities, and cases treated in preventive way. Each case has confirmed pathological diagnosis. Clinical data were well preserved and comprehensively organized with convincing clinical outcome. Through many years of follow-up, this shows that acupuncture and herbal medicine are the very effective and necessary modalities in dealing with breast cancer patients.

The Safety of Acupuncture in Hospitalized Patients on Anticoagulant Therapy- Documentation of Bleeding Related to Acupuncture Treatment

Miller C, Hopperstad B, Johnson PJ, Abbott Northwestern Hospital

Purpose: As acupuncture becomes increasingly available in allopathic medical settings, healthcare providers raise concerns about patient safety. One such concern is hemorrhage. This study examines the incidence of bleeding at acupuncture points in hospitalized patients on anticoagulants. **Methods:** Data were obtained from electronic medical records for 1273 inpatient acupuncture treatments occurring at one large Midwestern hospital between January and June 2010. We examined data for 350 treatments received by 229 patients on Warfarin who also had an INR drawn the same day. INR values were dichotomized at the 90th percentile as high (>=2.3) or low (< 2.3). Means and percents were compared by INR level. Analysis included chi-square, t-tests, and Wilcoxon rank-sum tests. **Results:** The sample included 106 males and 123 females ages 29 to 95 (mean = 64.4 years; SD=11.6). Overall, 350 acupuncture treatments were observed (median per patient = 1; Q1,Q3 = 1,2). Few significant differences in patient characteristics were detected by INR classification. Of 350 treatments, 14.6% (n=51) had bleeding noted. Cleanup with Q-tip occurred for 98% (n = 50). Percent with bleeding noted was no different between those with high INR and those with low INR (14.3% vs. 14.6%; p = 0.96). **Discussion:** Minimal bleeding was noted at acupuncture points in patients on anticoagulant therapy. Moreover, incidence of bleeding did not differ by INR level for this sample. **Conclusion:** Our findings suggest that acupuncture can be used safely for patients on anticoagulant therapy with INR values in the therapeutic range.

Integrating Acupuncture and Health Sciences in a Master's Degree Curriculum

Duncan K, Tai Sophia Institute

Purpose: A recent revision of our Bioscience curriculum sought to expand teaching beyond the basic ACAOM requirements in an effort to prepare graduates to better integrate their practices with allopathic medicine, to address the variety of bioscience requirements in various U.S. states and to prepare students to adapt to new discoveries in the acupuncture field. **Methods & Results:** An experienced multi-disciplinary team of educators designed and implemented the following changes: 1. Core courses were designed to cover all ACAOM requirements and are taught by acupuncturists with doctoral level training in course topics. 2. A horizontal curriculum strand addresses medical information literacy. 3. Basic and applied science courses were designed as electives to enable students to choose science courses required by different states in the U.S., as these requirements vary. Other electives courses focus on topics that support collaboration between allied health practitioners (such holistic medicine and mind/body medicine). 4. Case presentations were included in the curriculum where practitioners from multiple disciplines (such as acupuncturists, herbalists, allopathic medical practitioners) recommend treatment plans. 5. A student acupuncture research symposium and a research course introduce students to new research in the field of acupuncture. **Discussion & Conclusion:** The field of acupuncture is rapidly changing. Improving acceptance of acupuncture prompted a redesign of Bioscience coursework. We designed a curriculum that prepares and empowers acupuncture students to adapt to changes in requirements, to recognize opportunities for integrative practice and to embrace new developments in the field of acupuncture.

Acupuncture, Chinese Herbal Medicine Attenuates Dystonia

Fan A, McLean Center for Complementary and Alternative Medicine, PLC

Dystonia, one of the movement disorders, represents a group of difficult-to-treat neurological diseases sharing characteristics of muscle spasms. Acupuncture and Chinese medicinal herbs are two main therapies widely used by Dystonia patients except in conventional medicine. Since 1998, we have applied acupuncture or/and Chinese herbology to treat Dystonia in a total of 31 patients. Among them, 15 cases were treated by Chinese herbology (individualized herbal "tea," main formula, Ling Jiao Gou Teng Tang), 7 cases by acupuncture (mainly scalp acupuncture), 9 cases by both acupuncture and Chinese herbology depending on patients' cultural background and living area. The treatment course was one month to three years. **Results**: 12 (38.7%) cases reached clinical "cured"/significant improvement or very stable with minimal symptoms (acupuncture group 3, herbology group 5, acupuncture and herbology group 4 cases), improving 11 cases (35.5%), no significant improvement 8 cases (25.8%). No obvious side effects were found. The most important experience is that the treatment needs enough time, i.e., at least two months.

The Effect of Acupuncture on Pain in the Acute Care Setting: The Penny George Institute for Health and Healing Experience

Weiss-Farnan P, Kocher Z, Johnson P, Abbott Northwestern Hospital

Introduction: Pain control is an evaluative standard on which hospitals are judged by the Joint Commission. Acupuncture is a non-pharmacological treatment for pain that is available to acute care patients in a large Midwestern hospital. **Purpose:** To examine whether acupuncture is an effective intervention for pain in a diverse acute care patient population in an inpatient setting. Methods: Acupuncture treatments are provided to inpatients with a physician order. Patients rated their pain using a verbal analog scale (0 to 10, with 10 being the most severe pain) at the beginning and end of each acupuncture treatment. Data were obtained from the electronic medical record for patients who received inpatient acupuncture treatments for pain between September, 2009, and March, 2010. Mean differences in self-reported pain level were analyzed using a two-tailed t-test. **Results:** During a 15-month period, 1461 inpatient acupuncture treatments were provided for pain relief. Complete data were available for 854 treatments. The sample included 814 women and 647 men. Patients were seen in each specialty area. Difference between pre- and post-treatment pain scores indicated a 62.6% reduction in self-reported pain level after treatment with acupuncture (mean pre=3.4 vs. mean post=1.3; $P < 0.001$) **Discussion:** Acupuncture is routinely provided to acute care patients in a large Midwestern hospital. Our analyses indicate that acupuncture is an effective intervention for pain in a diverse inpatient population. **Conclusions:** Acupuncture is an effective non-pharmacologic intervention for pain. Future research will demonstrate its effect on daily hospital costs and patient satisfaction.

A Description of a Group Acupuncture Model of Delivery in a Hospital-Based Joint Replacement Center

Weiss-Farnan P, Miller C, Hopperstad B, Abbott Northwestern Hospital

Purpose: To examine the effects of a group model of acupuncture treatment on pain for joint replacement patients in an acute care setting. **Methods:** In a large Midwestern hospital, group physical therapy is provided to joint replacement patients. Orthopedic surgeons added acupuncture to the standard post-operative care provided through the Joint Replacement Center (JRC). Acupuncture is introduced in the pre-hospital class for surgery preparation and provided immediately after physical therapy on post-operative days one and two. Pre- and post-acupuncture

treatment scores for pain are recorded in the electronic medical record. Mean differences in self-reported pain scores were analyzed using a two-tailed t-test. **Results:** Between 1/1/2010 and 9/30/2010, 654 acupuncture treatments were provided to 427 unique patients. The sample included 252 women and 172 men ages 27 to 95 (mean 65. 5; SD 12.4 (women) and SD 11.33 (men). Average pre-treatment pain scores were 4.1, and average post-treatment scores were 2.3, demonstrating a 45.3% decrease in self-reported pain level ($P < 0.001$). **Discussion:** Group acupuncture significantly decreased self-reported pain in a sample of post-operative joint replacement patients. The addition of acupuncture to the JRC model of delivery is a distinguishing characteristic of the services provided by this Midwestern hospital that competes with other hospitals to provide this elective surgery, making it unique among the community options. **Conclusions:** Group acupuncture as part of the standard of care provides post-operative pain relief for joint replacement patients.

The Usefulness of Korean Hand Therapy as an Adjunctive Treatment for Pain in an Acute Care Hospital

Weiss-Farnan P, Hopperstad B, Johnson P, Abbott Northwestern Hospital

Introduction: Korean Hand Therapy, using the hand to treat imbalances in the body, is a therapy based on principles of traditional Oriental medicine. The treatment uses metal pellets attached to an adhesive tape that is applied to a specific reflex point. Purpose: To examine changes in pain scores of hospitalized patients who have been treated using Korean Hand Therapy. Methods: Data were obtained from the electronic medical record for 209 patients who received Korean Hand Therapy between January and June, 2010. Patients rated pain scores using a verbal analog scale (0 to 10) both before and after therapy. Data are collected and recorded in the electronic medical record at the time of the intervention. Mean differences in self-reported were analyzed using two-tailed t-tests. **Results**: Pain levels were reduced by 51% after receiving Korean Hand Therapy (Pre: 4.36 to Post 2.62; $P < 0.001$). **Discussion:** Korean Hand Therapy significantly reduced pain and anxiety in a sample of hospitalized patients. Benefits for using this therapy in the hospital setting include: the therapy is easily and quickly applied, the patient can control the length of the treatment, and non-acupuncturists can easily be taught to apply the therapy including: nurses, physical therapists, other integrative healthcare professionals, and family members. **Conclusions:** Korean Hand Therapy is a non-invasive treatment that can be useful in reducing pain in the acute care environment.

Skin Conductance at 24 Source (Yuan) Acupoints in 8,637 Patients: Influence of Age, Gender, and Time of Day

Chamberlain S, Colbert AP, Larsen A, National College of Natural Medicine

The clinical practice of recording skin conductance (SC) at acupuncture points (acupoints), as a diagnostic and/or therapeutic monitoring aid may have scientific merit. However, influences of age, gender and time of day on these recordings is unknown and it is unclear whether SC at acupoints differs from SC levels in general (as reported in psychophysiology research). This paper summarizes SC data obtained with the AcuGraph 3® Digital Meridian Imaging System™ between June, 2005, and March 31, 2010. An initial dataset of 117,725 SC examinations was scrubbed to include only the first SC examination on individual patients and exclude potentially faulty data. The final dataset consists of SC recordings at the 24 Source (Yuan) acupoints in 8,637 patients, collected by 311 practitioners. Twelve left/right average conductance measures and an overall average of the 24 acupoints were assessed.

Statistical analyses included two sample t tests, three way analyses of variance and linear regression. Results indicate that mean SC at acupoints, similar to SC in general, is higher in males, higher in afternoons and declines with age. Not previously reported, the rate of SC decline with age differs at different acupoints between males and females. These findings have substantial implications for acupuncture research and practice.

The Neuroendocrine Mechanisms of Regulatory Effects of Electroacupuncture on Traumatic Stress-Induced Immune Dysfunction

Cao X-D, Wang J, Wang Y-Q, Shanghai Medical College, Fudan University

In addition to the analgesic effect of acupuncture, an increasing number of clinical and experimental studies showed that sequential electrical stimulation applied to certain points on human body, such as Zusanli (ST 36), was favorable and effective in the treatment of stress-induced immunodeficiency and physical disorders. The purpose of this study was focused on the systemic immune-regulatory pathway related with surgical stress, including the HPA axis and SNS, as well as various neuromodulators including cytokines and microglia cell. The results indicated that surgical trauma stress could activate the HPA axis and SNS, the main cause of post-surgical immune dysfunction. EA could regulate the HPA axis and may inhibit lymphocyte apoptosis and inflammatory response after surgical stress. A clinical study on immune modulatory function of EA on post-operation patients showed that EA could improve the function in patients with gastrointestinal tumor undergone surgery and chemotherapy. The scientific basis of immunomodulatory effects of acupuncture correspond to the modern notion of reestablishing homeostasis by regulating the interactions between the neuro-endocrine-immune systems. An integrated investigation including the approaches of molecular biology, integrative physiology, and clinical research is considered to further improve the understanding of the acupuncture-mediated regulation of neuroimmune function, and eventually lead to better applications of acupuncture for the treatment of post-surgery immune disturbance.

High Performance Thin Layer Chromatographic (HPTLC) Analysis of Dan Shen (Salvia miltiorrhiza) Roots Grown in Different Regions of the World

Schoenbart B, Five Branches University

Context: Comparative analysis of bioactive compounds in Dan Shen (Salvia miltiorrhiza) roots grown in China and the United States. **Objective**: Determine whether the roots of Dan Shen (Salvia miltiorrhiza) organically cultivated in the United States have a similar constituent profile to roots grown and imported from China. Research Design and Methods: Samples of Dan Shen (Salvia miltiorrhiza) were collected from a variety of Asian sources. Using High Performance Thin Layer Chromatography (HPTLC), these were then compared to samples grown organically in the United States. **Results**: The roots grown organically in the U.S. showed high levels of the bioactive tanshinones and salvianolic acid. In all cases they compared favorably with the Asian samples both qualitatively and quantitatively. Both organically grown samples from the U.S. appeared to have equal or higher levels of these important compounds. **Conclusions:** Dan Shen (Salvia miltiorrhiza) can be successfully grown outside of China with organic agricultural methods. The harvested roots appear to have high levels of known bioactive compounds. This has positive implications for the environment, both in the reduction of pesticide and synthetic fertilizer usage, and in reducing pressure on Chinese agricultural land due to increased demand for Chinese herbs worldwide.

Effects of Electroacupuncture (EA) on Cold Stress-Induced Increases in Peripheral and Central (Paraventricular Nucleus-PVN) HP Axis Hormones

Eshkevari L, Lao L, Egan R, Georgetown University Medical Center

Chronic stress can exacerbate existing diseases. EA has been proposed to allay the effects, and although the mechanism is not clear, actions on the HPA axis have been suggested. Our objective was to determine if EA at acupoint Stomach 36 (EA_{St36}) blocks chronic cold stress-induced increases in HPA hormones. Adult male S-D rats with jugular catheters were subjected to 14 days of cold stress. Blood was collected at days 0 and 14; PVN tissues were collected on day 14. EA (Sham-EA *vs* EA_{St36}) was performed each day following stress. Compared to non-stressed controls (0.52±0.15ng/mL) stress and stress+sham EA increased plasma ACTH (Stress: 0.70±0.08 ng/mL; stress+sham: 0.75±0.09 ng/mL, respectively, $P<0.05$ *vs* cont) and corticosterone (CORT) (control: 70.1±26.9ng/mL; stress: 317.2±49.1 ng/mL; and stress+sham: 555.2±61.5 ng/mL, $P<0.01$). In sharp contrast, EASt36 prevented the increases (0.4±0.09 and 233.6 ng/mL ± 39.51, ACTH and CORT, respectively). These effects were long-lasting over 4 days: while cold-stress continued, EA treatments were withdrawn. ACTH and CORT were still at control levels in EASt36, but not sham EA rats (ACTH: EASt36 0.276 ng/mL ± 0.021, Sham-EA 0.683 ng/mL ± 0.095; CORT: EA_{St36} 146.6 ng/mL ± 31.39, sham-EA 413.5 ng/mL ± 41.20). Blocking CORT receptors with RU486 resulted in suppression of stress-induced CORT and exaggerated increases in ACTH indicating higher level control. Thus the PVN was analyzed by IHC and qPCR for CRH levels, and mirrored the above effects. Behavioral studies further confirmed these results. Our findings support EA_{St36} suppression of chronic stress-induced increases in HP hormones, peripherally and centrally. This work supported by American Association of Nurse Anesthetists Research Grant to Ladan Eshkevari, PhD, CRNA, LAc.

Electrodermal Activity at Acupuncture Points: Literature Review and Recommendations for Reporting Clinical Trials

Colbert A, National College of Natural Medicine

Electrodermal activity (EDA) at acupuncture points (APs) has been investigated for its utility as a diagnostic aid, a therapeutic monitoring tool, and a physiological outcome measure. However, the research methodologies reported in published trials, however, vary considerably. Publications often lack sufficient details about electrical instrumentation, technical procedures, laboratory conditions, recorded measures and control comparisons to permit a critical appraisal of individual studies or to replicate findings. We developed a 10-category (54 sub item) Quality of Reporting scale based on: technical issues associated with EDA measurements, publication requirements for reporting EDA in the psychophysiological literature, and recommendations of the CONSORT Statement for reporting clinical trials. Using our Quality of Reporting scale, we extracted data from 29 studies that evaluated EDA at APs in human patients and generated weighted scores for each of 10 categories of essential information. Of the 29 studies reviewed only 9 scored a total greater than 50% in reporting details of essential information. To rigorously build a program of research on EDA at APs we need to begin to standardize research methods and reporting protocols. We propose a checklist of informational items for use by future clinical trial investigators of EDA at APs.

Reliability of AcuGraph System for Measuring Skin Conductance at Acupoints

Colbert A, National College of Natural Medicine

Objective: There are many commercially available instruments for measuring electrical conductance at acupoints, but there is little information about their reliability. The aim of this study was to quantify measurement variability and assess reliability of the AcuGraph system – a commonly used electrodermal screening device. **Methods:** Four experiments were conducted to measure variability in electrical conductance readings obtained by the AcuGraph system. The first involved measuring known resistors. The second measured non-human organic matter. The third was a test-retest assessment of the Yuan-Source and Jing-Well points in 30 healthy volunteers who were measured by a single operator. The fourth was an inter-operator reliability evaluation of seven acupuncturists at the Yuan-Source and Jing-Well acupoints on four individuals at two time points. **Results:** Against known resistors, the AcuGraph had an average coefficient of variability (CV) of 1.8% between operators and test-retests. On non-human organic material the AcuGraph had an average CV of 0.88% and 2.83%. When a single operator tested 30 participants, the average reliability for the Yuan-Source points was 0.86 and 0.76 for Jing-Well points with a CV of 23.2% and 25.9% respectively. The average CV for the seven acupuncturists was 24.5% on Yuan-Source points and 23.7% on Jing-Well points. **Conclusions:** The AcuGraph measures known resistors and organic matter accurately and reliably. Skin conductance at acupoints recorded by one operator was also reliable. There was less consistency in electrodermal recordings obtained by seven different operators. Operator training and technical improvements to the AcuGraph may be required for satisfactory consistency among operators.

Chinese Medicinal Herbs in Relieving Perimenopausal Depression: A Randomized, Controlled Trial

Qu F, Cai X-F, Gu Y-E, Women's Hospital, School of Medicine, Zhejiang University

Objective: To explore the effects of a defined formula of Chinese medicinal herbs, GengNianLe (GNL, also called perimenopausal depression relieving formula), in relieving perimenopausal depression in Chinese women. Methods: Between September, 2004, and April, 2008, 47 Chinese women were blinded to randomization into a GNL group with 21 cases and a comparison group with 26 cases using a randomization chart constructed by randomizing numbers with Microsoft Excel. The depression was rated with the 24-item Hamilton Depression Scale (HAMD). The serum levels of follicle stimulating hormone (FSH), luteinizing hormone (LH) and estradiol (E2) were respectively detected before and after the treatment. **Results**: After twelve weeks of treatment, both groups' HAMD scores decreased significantly ($P<0.05$) with no significant difference between the groups ($P>0.05$). The levels of FSH decreased significantly and the level of E2 increased significantly in both of the two groups, and they changed more in the comparison group. No side-effect of the treatment was reported in both of the two groups during the period of the treatment. **Conclusions:** The Chinese medicinal formula, GNL, showed promise in relieving perimenopausal depression and merits further study.

Analysis of Therapeutic Effect on Hand-Foot-Mouth Disease Treated with Pricking Moxibustion Combined with Medicine

Zhang Q, Yang J, Chu H, Anhui University of Traditional Chinese Medicine

Purpose: To observe the therapeutic effect of hand-foot-mouth disease with pricking moxibustion and to analyze the mechanism of action. Methods: Seventy-five cases were randomized into 3 groups, of which, in the combined therapy group of moxibustion and medicine (22 cases), the pricking moxibustion and routine Western medicine treatment were provided in combination; in the Chinese herbal medicine group (29 cases), oral administration of Chinese herbal medicine routine Western medicine treatment was provided.

Involvement of Opioid Receptors in Electroacupuncture-produced Anti-allodynia/hyperalgesia in Rats with Chemotherapy-Induced Pain

Zhang, Y, Li A, Lao L, Center for Integrative Medicine, School of Medicine, University of Maryland

Purpose: Research supports the effectiveness of acupuncture for such conditions as chronic low back and knee pain. In a five-patient pilot study the modality also improved the symptoms of chemotherapy-induced neuropathic pain. Methods: Using an established rat model of paclitaxel-induced neuropathic pain, we evaluated the effect of electroacupuncture (EA) on chemotherapy-induced neuropathic pain, not previously studied in an animal model, hypothesizing that EA would relieve the resulting mechanical allodynia/ hyperalgesia, which was assessed 30 minutes after EA using von Frey filaments with bending forces of 2, 4, 6, and 15g. **Results**: Beginning on day 13, stimulations of 4-15g significantly increased response frequency in paclitaxel-injected rats compared to those injected with vehicle. EA at 10Hz significantly ($P<0.05$) decreased response frequency at 4-15g compared to sham EA; 100Hz only decreased response frequency at 15g. Compared to sham EA plus vehicle, 10Hz plus either a μ, δ, or κ opioid receptor antagonist did not significantly decrease mechanical response frequency, indicating that all three blocked EA inhibition of neuropathic pain. Discussion: Since we previously demonstrated that μ and δ but not κ opioid receptors affect EA anti-hyperalgesia in an inflammatory pain model, these data show, convincingly, that EA inhibits pain through different opioid receptors under varying conditions. **Conclusion**: Our data indicate that 10Hz inhibits mechanical allodynia/ hyperalgesia more potently than does 100Hz, that EA significantly inhibits chemotherapy-induced neuropathic pain through three spinal opioid receptors, and that EA may be a useful complementary treatment for neuropathic pain patients. Supported by NIH Grant R21AT004113 and P01 AT002605.

Acupuncture Alleviates Affective Pain in a Rat Model of Inflammatory Hyperalgesia

Zhang R, Li A, Zhang Y, Center For Integrative Medicine, School of Medicine, University of Maryland

Purpose: Pain has both sensory-discriminative and emotional-affective dimensions. Previous studies demonstrated that electroacupuncture (EA) alleviates the sensory dimension, but its action on pain affect was unknown. Methods: We combined an inflammatory pain rat model, produced by a complete Freund adjuvant (CFA) injection into the hind paw, with a conditioned place avoidance (CPA) test to determine whether EA inhibits pain-induced affective response and, if so, to investigate the possibility that anterior cingulate cortex (ACC) opioids underlie this effect. Male Sprague-Dawley rats (250-275g, Harlan) were used and not stimulated during pain-paired conditioning. **Results/ Discussion:** The rats showed place aversion (i.e. affective pain) to a pain-paired compartment by spending less time in it after conditioning. An analgesic dose of intrathecal morphine inhibited acquisition of the aversive response but had no effect on display of an established one, while systemic non-analgesic morphine prevented acquisition and blocked display of the affective reaction. This suggests that affective pain is underpinned by mechanisms different from those of hyperalgesia. The effect of EA was evaluated before pain-paired conditioning and before a post-conditioning test. Rats given EA showed no aversion to the pain-paired compartment, indicating that the treatment inhibits acquisition and display of affect. Mu and kappa opioid receptor antagonists (CTOP and nor-BNI) blocked EA inhibition of acquisition and display, respectively, of the affective dimension. **Conclusion**: These data demonstrate that EA activates opioid receptors in the ACC to inhibit pain-induced affective response and that EA may be an effective therapy for both sensory-discriminative and affective dimensions of pain. Supported by NIH R21AT005474 and P01AT002605.

What are the Barriers to Teaming Up for Patients? A UK Perspective

Stuardi T, University of York

Purpose: The primary purpose of this study was to explore acupuncturists' and physicians' perceptions on the acceptance of acupuncture as a valid treatment modality. Secondly those perceptions were placed in the context of the National Health Service and examined in terms of potential barriers to integrated treatment.

Methods: Data were collected as part of a nested qualitative study of an RCT for acupuncture treatment of IBS. Both the acupuncturists and physicians were purposively recruited to participate in an in-depth interview. Data were analyzed using a thematic framework approach. **Results**: Eleven acupuncturists (8F, 3M) and eleven physicians (3F, 8M) with an average of 7.5 and 13.2 years of experience respectively, completed an in-depth interview. The acupuncturists perceived that acupuncture was gaining acceptance as a valid treatment and that this shift was due in part to increased research and the publication of NICE guidelines that recommended acupuncture. In comparison, the physicians also perceived a shift as indicated by the phrases such as "more accepting" and "more mainstream," which were likely to be influenced by increased evidence and medical acupuncture training. In addition to their agreement that acupuncture is gaining acceptance, the acupuncturists and physicians also identified funding and training as potential barriers to integrated treatment. **Conclusions**: Despite the increase in the acceptance of acupuncture as a valid treatment, funding and training barriers may prevent acupuncturists from participating in integrated treatments. In order to team up for patient care, these barriers need to be addressed.

The Effect of Electroacupuncture on the Protein Kinase Signaling Pathways of Chronic Stress Rats

Liang J, Dai W, Beijing University of Traditional Chinese Medicine

Objective: To explore the action of the protein kinase signaling pathway PI-3K/ Akt, SAPK / MAPK and p38/MAPK in the electroacupuncture (EA) antidepression. Methods: 1.Sixty-five Sprague-Dawley rats were randomly divided into control group, control group combining with EA (control+EA group), model group, EA group, and Prozac group. 2. Establish Chronic unpredictable mild stress (CUMS) rat model; use "Bai-Hui" and "Yin-Tang" points with EA. 3. The phosphorylation of JNK, Akt, and p38 of the cerebral cortex and hippocampus were analyzed with Western blot. 4. The annexin V-FITC/PI double staining flow cytometric method was used to detect the hippocampal apoptotic rates. Result: 1. The hippocampal JNK phosphorylation level for the model group was higher than control group ($P<0.05$), but the phosphorylation levels of Akt and p38 were no significant differences ($P> 0.05$). 2. The hippocampal JNK phosphorlyation levels in the EA group and Pozac group were significantly lower than model group ($P<0.05$). 3. The annexin V-FITC/PI double staining results indicated that the hippocampal apoptotic rate in the model group was higher than that in control group and control+EA group ($P<0.05$ respectively). The apoptotic rates of EA group and Pozac group were lower than that of the model group ($P<0.05$ respectively). **Conclusion**: 1. EA can effectively reduce or prevent the occurrence of depressive behaviors of CUMS rats. It was similar to Prozac. 2. The hippocampal JNK phosphorylation of CUMS model rats were significantly higher than other groups. 3. EA can effectively prevent or reduce the activation of JNK signal pathway with the phosphorylation of JNK was significantly inhibited. 4. The hippocampal neurons apoptotic rates of CUMS model rats were significantly increased. EA can reduce the apoptotic rates.

Associations Between Perceptions of the Social World and Healing

Conboy L, New England School of Acupuncture

Purpose: This analysis uses qualitative and quantitative data to describe how the process of symptom reduction (or healing) and perception of the social world are related. Data was gathered in a randomized controlled trial (n=262), with an imbedded qualitative interview study (n=27), testing the therapeutic effect of a supportive acupuncture patient-practitioner relationship in reducing the symptoms of Irritable Bowel Syndrome. The main trial found that the supportive relationship was more effective than any drug on the market. What are the possible mechanisms of such change? Methods: This analysis considers how subjects' descriptions of their social world change as the trial, and their healing, progress. The qualitative interviews were analyzed using grounded theory methodology. Quantitative data from the larger trial is offered to assist in these explanations; particularly, changes in anxiety, stress, perceived social support, and social networks are considered. Discussion: The causative elements of Irritable Bowel Syndrome, and the social changes reported, are supported by an East Asian medicine perspective as well as other more holistic Western clinical theory. Ultimately, for some subjects, healing of clinical symptoms was closely associated with a healing of their social world.

Comparison of Pre and Post Treatment Scores of Patients Receiving Acupuncture for Pain

Conners V, Academy of Oriental Medicine at Austin

This study was designed to answer the following questions: 1. Do patients seeking treatment for pain show clinical improvement in their pain after treatment with acupuncture? 2. Do patients seeking treatment for pain show statistical improvement in their pain after treatment with acupuncture? This was a retrospective, pre/post test design study. Patients seeking acupuncture treatment for pain at a local primary care clinic between August, 2005, and December, 2009, were the subjects. Patients seeking acupuncture treatment for pain were asked to identify the location of the pain and to rate the degree of pain from 0 to 10; where 0 represented no pain and 10 represented the worst pain they had ever experienced. After receiving acupuncture treatment, patients were again asked to rate the degree of pain they were experiencing. Patients were allowed to receive multiple treatments and pain scores were recorded at each visit. The chief pain complaints included back pain (49%), limb pain (27%), headaches (4%), abdominal pain (2%), and other miscellaneous pain (18%). Using the One-Tailed Wilcoxon Matched-Pairs Signed-Ranks Test, the pre-treatment pain scores were compared with post-treatment pain scores. Participants in the study reported a statistically significant decrease in pain ($P<0.0001$). Patients experienced an average decrease in pain of 3.0±1.9, with a mean pain pre-treatment pain score of 5.7±2.0 and a mean post-treatment pain score of 2.7±2.1. Patients in this study experienced a reduction in pain that was both clinically and statistically significant. This result is unique to that documented in much of the CAM pain literature. Even though this study showed a consistent reduction in pain, the benefits of acupuncture for pain relief must continue to be explored and researched.

The Study on Clinical Effect and Mechanism of Electric-Acupuncture Therapy for Depression

Zhang W, Duan D, Bao T, Beijing University of Traditional Chinese Medicine

Method: 75 minor and mild depression patients were divided into three groups: A (fluoxetine), B(electro-acupuncture), C(fluoxetine+electro-acupuncture). Use HAMD, SDS as evaluation tool. Use PROBE-J sequence at GE EXCITE II Signa 3.OT MRI system on Single Voxel of the ROI of bilateral hippocampus and frontal lobe of 20 healthy volunteers, as well as depression patients. Compare differences of the NAA/Cho, NAA/ Cr and Cho/ Cr between men and women, healthy volunteers and the patients, before and after treatment. **Results**: 1. There were no significant differences between men and women in NAA/ Cho, NAA/ Cr and Cho/ Cr in each lateral hippocampus and frontal lobe($P<0.05$). 2. There was a significant bilateral hippocampus' NAA/Cr decrease and a significant bilateral frontal lobe's Cho/ Cr increase of the depression patients before treatment ($P<0.05$). After treatment, NAA/Cr in bilateral hippocampus of B and right hippocampus of C increased significantly ($P<0.05$); left hippocampus' NAA/ Cr of C increased very significantly ($P<0.01$); bilateral frontal lobe's Cho/ Cr of A and B decreased significantly ($P<0.05$); bilateral frontal lobe's Cho/ Cr of C decreased very significantly ($P<0.01$). 3. Positive relationship occurred between B and C's HAMD reduction rate and bilateral hippocampus's NAA/Cr. Negative relationship occurred between C's HAMD reduction rate and bilateral frontal lobe's Cho/ Cr. **Conclusion**: 1. There is difference in the density of the metabolite in frontal lobe and hippocampus of common adults, reflecting their structural differences. 2. There is difference between depression patients and common people in the density of the metabolite in frontal lobe and hippocampus, relating to the nosogenesis of depression.

How Acupuncturists Prepare Themselves to Deliver Care, An Interview Study

Cassidy C, Windpath Healing Works, LLC

As part of the Acuperceptions Project, 20 experienced acupuncturists from different parts of the U.S. and trained at a variety of schools were interviewed. One question asked how they prepared themselves to work each day. While the answers might have featured reading research articles or prepping patient records, in fact, the majority spontaneously reported spiritual/energetic self-preparation. This paper presents their answers and shows how these practitioners link spiritual and energetic self-care to enhancing their ability to practice patient-centered acucare. Using phrases like "I can leave my ego outside the door," or "remain present" to patients, they report working daily to maintain their own energetic balance without experiencing burnout. Besides offering insight on a significant issue—that of practice fatigue—these data also help show how American practitioners integrate Asian medical and spiritual-energetic practices with American values such as patient-centered care and medical holism.

A Review of the Experience and Feasibility of Delivering Chinese Medicine to Populations in the Developing World with Little to No Access to Healthcare

Taromina K, Finger Lakes School of Acupuncture and Oriental Medicine of New York Chiropractic College and Global Alternative Healthcare Project

Abstract: To describe the experience and feasibility of delivering Chinese medicine to populations in the developing world with little to no access to healthcare. **Purpose:** The Global Alternative Healthcare Project (GAHP) organizes quarterly visits to specific sites in Navajo Nation, Jackson, Wyoming, villages throughout Bali, Indonesia, and Nepal. GAHP teams have provided over 5,000 treatments over a 3 year period. In this review, we describe the application of the whole system of Chinese medicine, including acupuncture, moxabustion, herbal medicine, tui na, qi gong, and lifestyle and dietary recommendations, at these remote locations. **Methods:** We examine the feasibility of applying Chinese medicine as a whole system of care in isolated communities. Percentage of new and follow up patient visits, patient demographics, types of complaints treated and strategies for intervention and patient education will be presented. Several case studies will be explored in order to help illustrate the process. **Results**: We propose that Chinese medicine offers an effective and feasible intervention as a whole system of care in these communities. **Conclusion:** In these field environments, it is possible to explore Chinese medicine as a comparative study of

whole systems and may have a role to play in advancing clinical education options. It is promising that this whole system may prove to be an effective alternative in naturalistic and isolated communities without ready access to a biomedical model of care. If this can be effectively determined, it can result in an increase in the work of organizations such as GAHP and promote the use of Chinese medicine to the underserved throughout the world.

Integration of AOM in Mainstream U.S. Health Care: Sustainable Ways to a New National Standard of Care for U.S. Citizens

Manross J, Tri-State School of Acupuncture

Notions of health, wellness, and preventative medicine are being embraced now more than ever. Excitingly, acupuncture and Oriental medicine (AOM) are becoming a part of the national conversation and can be more fully integrated into mainstream health care in several ways. AOM can powerfully affect mainstream U.S. health care by having a stronger presence in integrated medical settings, by advocating preventative medicine and health promotion through wellness centers and by demonstrating its cost-saving efficacy by reaching underserved communities of the United States. Sustainability through these measures would improve the health of U.S. citizens. In addition, these efforts could create wider avenues for public awareness, national funding for research and greater job opportunities for AOM practitioners. The AOM profession has the capability to significantly affect the health of U.S. citizens and become a larger part of a new national standard of care that is now emerging. With a larger presence in integrated clinical settings, a focus on preventative health and a greater inclusion as a part of the therapeutic landscape for underserved communities, AOM can integrate into mainstream healthcare and powerfully contribute to the improvement of health care for U.S. citizens. These three ways can close gaps in U.S. healthcare, promote patient welfare, and prove to a larger political and medical community that using AOM is safe, effective, and economical. These actions would further educate legislators, healthcare regulators and the general public regarding the value of acupuncture and Oriental medicine as a priceless preventative modality in a new emerging model of health care in the United States.

Effect of Acupuncture on Post-Operative Dental Pain

Lao L, Huang Y, Feng C, School of Medicine, University of Maryland, Baltimore

Background: Conventional treatment of post-operative pain in medical and dental practice typically involves analgesics, which are associated with pain-relief latency, a number of untoward side-effects, and prolonged periods of disability. In contrast, acupuncture, used for thousands of years in China to treat pain and other ailments, has few if any side effects. Purpose. This placebo-controlled, single-blind trial was to evaluate the effect of acupuncture on lengthening post-operative pain-free time compared to two sham acupuncture groups in a three-arm randomized controlled trial. Methods. Phase I (N=120) patients were randomly divided into three groups, n=40 per group: A: true acupuncture; B: distal sham insertion; C: adjacent sham insertion. Phase II (N=180), patients were randomly divided into three groups, n=60 per group: X: true acupuncture; Y: adjacent sham insertion based on the results of Phase I; Z: sham non-insertion. Acupuncture was performed immediately after oral surgery. Patients were asked to rate pain level after the treatment on site at 15 min intervals up to 6 h. A second treatment was given if a patient reported moderate pain on a discrete, four-point scale (0=none; 1=slight/mild; 2=moderate; 3=severe) and pain reached 30 mm on a continuous variable, formatted, 100 mm line visual analogue scale. Rescue pain drug was given to patients when they asked for pain control. **Results**. Statistically, true acupuncture performed significantly better than non-insertion sham control in controlling post-operative surgical pain by lengthening the median survival time to rescue pain drug. **Acknowledgment:** This work was supported by NIH Grant #: 8 RO1 AT00010. The contents of this abstract are solely the responsibility of the authors and do not necessarily represent the official views of NIH.

The Five Notes of the Chinese Pentatonic Scale for Strengthening and Harmonizing the Elements

Legge M, Five Notes Therapy

The five notes of the Chinese Pentatonic scale have come down to us with the corresponding elements. Water, Wood, Fire, Earth & Metal refer to musical modes as well as tones. The tones can be used therapeutically but only in a way that elicits measurable physical activity. Studies have shown that the brains of even non-musicians track with a musical rendition. When the composition contains tones outside the key, electrical activity has been documented. The five element tones correspond to the five non-harmonic tones outside of the given key. Each of these tones, when embedded in the musical piece, creates a different feel. When one non-harmonic tone is used then one element is being strengthened i.e., strengthen water, wood, etc. When two non-harmonic tones are used in the piece then two elements are being harmonized; either from the creation cycle or the control cycle. The piece itself can also conform to the principles of classical Chinese medicine (CCM) by being composed in a creation cycle sequence where one mode follows the next. Each of the pieces can be transposed into the other eleven keys yielding 360 therapeutic compositions for rebalancing patients. Some of the applications include Psychological Rebalancing, Seasonal Adjustments, Organ Therapy, Allergy Elimination, Detoxification, and pre and post natal care for mother and child. The compositional templates for baby contain no element – one yin and one yang. The other 30 templates are 1) Strengthen one element – yin and yang and 2) Harmonize two elements – yin and yang.

Electro-Acupuncture Protects Against Hypoxic-Ischemic Brain-Damaged Immature Rat via Hydrogen Sulfide as a Possible Mediator

Liu Y, Zou L-P, Du J-B, Capital Institute of Pediatrics

We investigated whether hydrogen sulfide (H2S) may be a mediator of electro-acupuncture (EA) stimulation treatment for hypoxic-ischemic brain damage (HIBD). We studied a HIBD 7-day-old rat model with 4 types of treatments: (1) 14 sessions of EA; (2) hydroxylamine (HA), an inhibitor of cystathionine-β-synthase (CBS), the key enzyme of H2S generation; (3) both EA and HA; or (4) no treatment. Sham-treated rats with or without EA were also studied. Regional cerebral blood flow (rCBF) was monitored before, during and after EA at different periods of treatment (d1, 7 and 14 sessions). We evaluated motor function, H2S levels, and CBS expression in the cerebral cortex and prepared cerebral pathomorphological images after 14 sessions of treatment. EA stimulation could increase local blood circulation and improve motor function in HIBD rats. HIBD significantly increased H2S levels of brain tissue as compared with sham treatment, and EA treatment could decrease the H2S generation. Rats with HIBD receiving both EA and HA therapy showed greatly recovered motor function and brain morphology. H2S might be a mediator of EA treatment of HIBD in rats.

Nitric Oxide-Mediated Neuronal Functional Recovery in Hypoxic-Ischemic Brain Damaged Rats Subjected to Electrical Stimulation

Liu Y, Zou L-P, Du J-B, Capital Institute of Pediatrics

The present study investigated the role of neuronal nitric oxide synthase (nNOS)/nitric oxide (NO) system in the pathophysiologic regulation of hypoxic-ischemic brain damage (HIBD) in baby rats subjected to electrical stimulation (ES). The motor

function, NO concentration in cortex, and protein expressions of nNOS were examined after 14 sessions of ES. Results showed that NO levels in cortex significantly increased 24 hr after hypoxic-ischemia than sham. ES could improve motor functions in HIBD rats and spontaneously decrease nNOS/NO system. In conclusion, the nNOS/NO pathway might play a critical role as mediator of neuronal recovery in HIBD rats after undergoing ES treatment.

Spleen-Kidney Yang Deficiency is the New Main Mechanism of Acquired Immunodeficiency Syndrome Associated Chronic Diarrhea: Insights from Complementary and Alternative Medicine

Dong Y-X, Ju L-C, Tan X-H, Tropical Medicine Institute, Guangzhou University of Chinese Medicine

Rationale and Objective: Many researches claimed Chinese medicine (CM) significantly improves the outcomes of Acquired Immunodeficiency Syndrome Associated Chronic Diarrhea (AIDs-ACD), but the mechanism is still unclear. This cross-sectional study aimed to identify the mechanism of AIDs-ACD from CM theory. Methods: With pre-formed questionnaire, medical data from patients attending Infection Department and CM Department between Apr 2009 and Oct 2009 were collected. The eligible participants were divided into 7 groups, including CD4>350 cells/ul (High Concentration in the Asymptomatic Stage, HCAS), CD4≤350 cells/ul (Low Concentration in the Asymptomatic Stage, LCAS), AIDs-ACD, AIDS-Associated Fever (AIDs-AF), AIDS-Associated Cough (AIDs-AC), AIDS-Associated Maculopapular Rash (AIDs-AMR), and Non AIDS-ACD (NAIDs-ACD). Two-Independent-Samples T Test, Nonparametric Test, Analysis of Variance, chi-square statistics were performed for data analysis. **Results**: A total of 140 patients, 20 per group, were enrolled in the outcome analysis. Male, sex transfusion, HAN people, married or cohabitation, primary school education, farmer or laborer were the main demography characteristics of AIDs-ACD. In the comparison between AIDs-ACD and other groups, spleen, stomach, dampness and yang deficiency had higher frequency than HCAS; spleen and dampness were higher than LCAS; spleen and stomach were higher than AIDs-AF; spleen, stomach and yang deficiency were higher than AIDs-AC; kidney, stomach and dampness were higher than AIDs-AMR; pneumonia, spleen, kidney, qi deficiency and yang deficiency were higher than NAIDs-ACD, and all the values of $p<0.05$. Discussion: The location of AIDs-ACD focused on spleen, kidney, and stomach, and the nature of disease focused on dampness, qi and/or yang deficiency. The main mechanism of disease was the spleen-kidney yang deficiency, with or without qi deficiency, dampness obstruction and/or stomach disharmony. Further study should focus on the general acceptable intervention establishment and animal experiment necessarily.

A 1H NMR-Based Metabonomics Study on the Acupoint Specificity Effect of Foot-Yangming Meridian in Treating Functional Dyspepsia

Wu A, Zhou S, Liu J, Acupuncture and Tuina College, Chengdu University of TCM

To investigate whether metabolic difference exists between acupuncture on specific acupoints of disease-relate meridian, on non-specific acupoints of disease-relate meridian, on acupoints of other meridians or on non-acupoints, 1H NMR-based metabonomic method was used to study the metabolism changes in Functional Dyspepsia (FD) after treated by different acupuncture method. The results showed that many plasma metabolites including Leucine/isoleucine, PtdCho, glutamine, alanine, proline, HDL, β-glucose, α-glucose and LDL/VLDL are deviating from normal condition in FD, among them, concentration of PtdCho and Leu/Ile are closely related to FD symptoms, they are potential biomarkers. Four kinds of acupuncture methods has certain positive role to FD potential biomarkers, but the intensity of adjustment and the continuation effect along with treating periods are different. Four kinds of methods can improve the levels of other key metabolites, but the main target metobolites, the intensity, the continuation effect along with treating periods and the scopes of the effect are different, The results provide some metabonomic basis for the specific effects of Foot-Yangming meridian in treating FD. Puncturing on specific acupoints of the stomach meridian has a more significant and intensive effect on the two kinds of potential biomarkers of FD, and this effect would be enlarged after four periods of treatment. For most of the other key metabolites, this method is more effective and has a more intensive targeted effect than other methods. Puncturing on non-acupoints could also influence the potential biomarkers and key metabolites of FD but with lower intensity, narrow range, and weaker continuous effect. Specific acupoints and non-specific acupoints in the stomach meridian have common metabolic features. Our study provides new clues for considering the connotation of the specific effects of Foot-Yangming meridian.

A Comparative Study with Trigger Point Dry Needling Under Ultrasound Guidance and Blind Technique—A New Approach for Myofascial Pain Syndrome Management

Bubnov R, Clinical Hospital "Feofania" of State Affairs Department, Kyiv

BACKGROUND: Most pain syndromes in clinical practice have myofascial nature, caused by the myofascial trigger points (MTrP). **MATERIALS AND METHODS:** The study included two groups with myofascial pain at different locations. The inclusion criterion was trigger points identification. The exclusion criteria were rheumatic pain, neuropathy. After inclusion 133 patients were randomly assigned to dry needle trigger point therapy either under ultrasound guidance (91 patients) or using clinical (palpatory) established landmarks (42 patients). Ultrasound scanning with a linear 5-10 MHz frequency tranceducer was carried out to identify the myofascial trigger point. Visual analogue scale data (0 to 10) were measured before, immediately after and 24 hours after the intervention. 50% or more decrease of pain measured by VAS was considered as success. **RESULTS:** In this study the dry needling of muscle trigger point under ultrasound control was performed. The pain relief effect (more than 50% of VAS decrease) was registered in all patients of two groups: from 7.2 to 1.1 points 24 hours after procedure at group A (pain level decreased on 84%) compared to improvement from 7.4 to 2.7 (pain level decreased on 63,5%) in group B ($P < 0.001$). Significant decreases were observed at average number of needled trigger points (2,6+0.54 in group A compared to 4,45+0.7 in group B). Puncture of some muscles in this study could not be possible without ultrasound visual navigation. **CONCLUSIONS:** In the study the trigger point dry needling of muscle trigger point under ultrasound control was performed. Ultrasound guidance significantly increases the pain relief effect, significantly decreases average number of needled trigger points and average number of treatment sessions.

Bioelectric Potential Measurements as a Means of Elucidating the Electrophysiology of Acupuncture

Spaulding K, Ahn A, New England School of Acupuncture

Bioelectric potential has been used in acupuncture research to provide evidence for the electrical nature of acupuncture. Yet potential measurements have been largely overshadowed by impedance measurements despite the fact that impedance tells more about the substrate and less about the endogenous response of the tissue. This study measured the bioelectric potential response to acupuncture needle stimulation to assess the electrophysiological effects of acupuncture needling. On fourteen

healthy volunteers, needles were inserted along the anterior forearm: Pericardium 4 (PC4), adjacent PC4 control (PC4ctr), PC6, and PC6 control (PC6ctr); the control points were chosen halfway between the PC meridian and the Triple Warmer (TW) meridian. The two proximal points (PC4, PC4ctr) were stimulated with the thrust method at three separate times, each one for ten seconds in random order, with a three minute interval in between. At all times, and on all four points, bioelectric potentials were measured on a bioinstrumentation amplifier. At the point of stimulation, large depolarizations of the potential (up to -100mV) were observed with a subsequent repolarization towards baseline potential levels in approximately 2 min. This depolarization response was not unique to either the meridian or control. But there was an induced polarization distally along the channel (on PC6 and PC6ctr) up to 5 mV that lasted about 15s. This polarization occurred on both meridian and control channels, but the response was statistically greater ($p<0.05$) at PC6 when PC4 was stimulated, compared to PC6ctr when PC4ctr was stimulated. Bioelectric potential readings are a valid method to measure this endogenous electrical phenomenon and it may shed some light on the electrophysiology of acupuncture needling.

Employee Use and Perceived Benefit of a Complementary and Alternative Medicine Wellness Clinic at a Major Military Hospital: Evaluation of a Pilot Program

Duncan A, Liechty J, Miller C,
Crossings HealingWorks

Objectives: To examine the feasibility of a weekly on-site CAM wellness clinic for staff at a military hospital and to describe employees' perceptions of program effectiveness. Setting: Restore & Renew® Wellness Clinic at a United States Department of Defense hospital. Subjects: Hospital nurses, physicians, clinicians, support staff, and administrators. Interventions: A walk-in wellness clinic was available to study participants from 8 am – 2 pm one day a week. Participants selected one or more modalities each visit: ear acupuncture, Clinical Acupressure, and Zero Balancing®. Outcome Measures: Self-report survey after each clinic visit to evaluate clinic features and perceived impact on stress-related symptoms, compassion for patients, sleep, and workplace or personal relationships. **Results**: Surveys completed after first-time and repeat visits (n=2,756 surveys) indicated that most participants agreed or strongly agreed they felt more relaxed after sessions (97.9%), less stress (94.5%), more energy (84.3%), and less pain (78.8%). Ninety-seven percent would recommend it to a co-worker. Among surveys completed after five or more visits, more than half (59-85%) strongly agreed experiencing increased compassion with patients, better sleep, improved mood, and more ease in relations with co-workers. Perceived benefits were sustained and enhanced by number of visits. The most frequently reported health habit changes were related to exercise, stress reduction, diet/nutrition, and weight loss. **Conclusions:** This study suggests that a hospital-based wellness clinic based on CAM principles and modalities is feasible, well-utilized, and perceived by most participants to have positive health benefits related to stress reduction at work, improved mood and sleep, and lifestyle.

Acupuncture's Effects on Relieving Symptoms for Post Radiation Cystitis and Prostatitis

Alves-de-Souza E, Pacific College
of Oriental Medicine

Objective: The aim of this study was to assess the response to acupuncture of patients who had moderate to-severe urinary symptoms that persisted after 12 months following the completion of radiation therapy for prostate cancer treatment. Design: This was a pilot study to generate preliminary data concerning potential effect sizes of acupuncture and sham acupuncture in the treatment of radiation prostatitis and cystitis. Outcomes Measures: A total of 10 subjects with cystitis and prostatitis were randomly assigned to one of three study groups. Verum acupuncture was administered twice during week one, then performed once a week for 8 weeks to points on kidney-bladder-spleen-liver-lungs meridians expected to treat cystitis/prostatitis. The effect of acupuncture (on the lower urinary tract symptoms) was assessed (every other week) using the IPSS (International Prostate Symptom Score), to monitor results throughout the study. A paired t-test was performed to determine significant changes in IPSS before and after the 4-months treatment period in the randomized arms. **Conclusions**: Both standard acupuncture and sham acupuncture treatment appear to improve the IPSS scores over the 4-month test period.

The Nitric Oxide Index—Ranking and Quantifying the Nitric Oxide Potential of Certain Foods

Bryan N, Zand J, Garg H, University of
Texas, Houston Center for Health Sciences,
Institute of Molecular Medicine

Abstract: It is well documented that nitric oxide (NO) is the most critical molecule in the body for maintaining normal blood pressure, optimizing blood flow and overall cardiovascular health. There is an emerging paradigm that certain foods promote NO production from the stepwise reduction of nitrate to nitrite to NO, providing an endothelium independent source of NO. However, epidemiological data indicate the nitrite and nitrate content of certain foods, mainly processed meats, is associated with a slight increase in the incidence of certain cancers due to nitrosative chemistry to form N-nitrosamines. Defining the context for potential health benefits of food sources of nitrite and nitrate while reducing or eliminating any potential risks is paramount in advancing this field of research. We have developed a novel system for scoring the NO activity of certain foods, which we call the Nitric Oxide Index (NOI). It is the first quantitative measure of its kind. The NOI takes into account the total nitrite and nitrate content along with the total antioxidant capacity of the food as determined by the oxygen radical absorption capacity (ORAC). The context of this combination effectively ensures that the endogenous nitrate and nitrite is reduced to NO while inhibiting and preventing any unwanted nitrosation reactions. Using this system we find that the green leafy vegetables, particularly kale and Swiss chard, have the highest NO activity and herbs such as basil and parsley are the highest on the index. We believe that such a system can be utilized to tailor diets to effectively restore NO homeostasis in certain patient populations, particularly those with or at risk for cardiovascular disease.

Effect of Electroacupuncture for Depression in a Rat Model

Xu S, Li S, Shen X, Shanghai Municipal
Hospital of Traditional Chinese Medicine,
affiliated with Shanghai TCM University

Objective: To investigate the antidepressant-like effect of electroacupuncture (EA) for depression in a validated rat model. **Methods:** Wistar Kyoto rats, a valid model of depression, were randomly divided into two groups, electroacupuncture (n=7) and placebo control (n=6). EA treatment was given once a day, five days a week, for nine weeks. The forced swim test (FST) and open field tests (e.g., a. rearing and grooming rate, b. central distance, c. central time, and d. total distance measurements) were conducted at weeks three, six, and nine after the initial treatment, and the Morris Water Maze test (MWM) was conducted at week three. **Results**: There were significant differences between EA and control in the FST at weeks three and nine ($p<0.05$), in rearing and grooming in the open-field test at week three ($p<0.05$), and in central distance ($p<0.05$) and central time ($p<0.05$) at week nine. In the MWM, there were significant differences between treatment and control in frequency of crossing the platform ($p<0.05$) and the area around the platform ($p<0.05$) at week three. **Conclusion**: Our data demonstrate that EA enhances memory and improves the behaviors related to depression in a rat model of depression and suggest that EA may have therapeutic effects on depression.

ActiveHerb™
Be active

THE VALUE YOU DESERVE

You have worked hard to build up your practice. You apply Chinese herbal medicines to maximize treatment benefits. Undoubtedly, you understand that effective treatment depends on choosing the quality and safe Chinese medicine. But is it enough? Are you also getting the best value, so that it is affordable to your patients while you enjoy a comfortable profit yourself?

With Guang Ci Tang® (廣慈堂) Chinese medicine, you don't have to compromise between quality and value. As a leading provider of premium Chinese medicine in the United States, we have been known for delivering unparalleled value while maintaining an unwavering dedication to product quality and safety for more than 15 years. Consider this: for every bottle of our Guang Ci Tang® extra-concentrated patent Chinese medicine, you get :

Twice the potency:

Guang Ci Tang® boasts a 5:1 concentration for its patent medicines. Other patent medicines commonly available are 2~3 times or lesser concentrated. Each Guang Ci Tang® bottle contains a total 40 grams of 5:1 concentrated decoction extracts, equivalent of 200 grams bulk herbs.

at Half the price:

Guang Ci Tang® sells at about half the price per 40 grams bottle compared to what other common brands sell for the similar sized bottle.

the end result is:

4 Times of Value

Guang Ci Tang® and ActiveHerb™ line of
Extra-Concentrated Patent Chinese Herbal Medicine.

Order today to get the VALUE you deserve.

New account receives an additional 10% discount

ActiveHerb Technology, Inc. • www.ActiveHerbWholesale.com

San Francisco Office Tel: (510) 487-5326 / Fax: (510) 487-0305 San Diego Office Tel: (858) 847-7310 / Fax: (858) 847-7312

An Effectiveness Study Comparing Acupuncture, Physiotherapy and Their Combination in Post-Stroke Rehabilitation

Zhuang L, Xu S, D'Adamo C, First Hospital Affiliated with Guangzhou Traditional Chinese Medicine University

Objective: To compare acupuncture and physiotherapy for effectiveness and reliability in treating hemiplegic patients after stroke. Methods: A multi-centered randomized controlled trial was conducted in seven in-patient settings. 274 hemiplegic patients diagnosed with ischemic stroke were randomly divided into three groups to receive usual care plus either acupuncture, physiotherapy, or acupuncture plus physiotherapy. The treatments were given once a day, six days a week, for four weeks. All patients were evaluated at baseline, after two weeks, and after four weeks with the Fugl-Meyer Assessment of Physical Performance (FMA), a modified Barthel index (BI), and the Neurologic Defect Scale (NDS). **Results**: There were no significant differences between the three groups at baseline. FMA, BI, and NDS scores were improved in all groups after week two ($p<0.05$) and further improved after week four ($P<0.05$). There were no statistically significant differences in outcomes between the three groups after treatment ($P>0.05$). **Conclusion**: Acupuncture was similarly as effective as the well-established physiotherapy treatment for post-stroke rehabilitation. However, the combination of acupuncture and physiotherapy was no more effective than either treatment alone. The clinical effectiveness, excellent compliance, and lack of adverse events associated with acupuncture in this study suggest that it may represent an additional treatment option for stroke patients.

Patient Characteristics and Use of the MYMOP Questionnaire at an Acupuncture Teaching Clinic

Hsu K-Y, Dunn J, New England School of Acupuncture

Purpose: 1) Describe sociodemographic and clinical characteristics of patients of an acupuncture teaching clinic; 2) Obtain preliminary data on treatment outcomes for patients with musculoskeletal pain or migraine headache. Methods: A retrospective chart review of new patients seen at the NESA main clinic between October 2009 and July 2010 was performed. Data abstracted from charts included the MYMOP questionnaire. **Results**: 421 patients meeting study criteria had mean age of 42 years, were predominantly female (72%) and married (41.6%). 47.5% had at least a college education, and 46% had prior exposure to acupuncture or Oriental medicine. Most patients had moderate or greater confidence in acupuncture treatment efficacy. Mean duration of treatment was 53 days. 50 patients' main and 31 patients' secondary complaints were musculoskeletal pain or migraine/headache (total = 81). Change in symptom severity with treatment was examined for the 74 patients with both an initial and at least one follow-up MYMOP. Main and secondary symptom severity, symptom-related activity limitation, and well-being MYMOP scales all showed at least a 15% improvement from baseline to 6 weeks. Discussion: Limitations include relatively small number of patients with complete MYMOP data and lack of (non-acupuncture) comparison group for treatment outcomes. Additional analyses will examine whether confidence in treatment efficacy correlates with outcomes. **Conclusion**: This study provides a snapshot of patients at an acupuncture teaching clinic during a 9-month period. It also provides information needed to optimize future clinical data collection and highlights a potentially valuable source of information on "real life" acupuncture treatment outcomes.

Evidence-Based Systems of KAMPO Medicine—Researches and Case Reports on Wulingsan

Yasui H, Ozaki K, Kashima M, Yasui Clinic, Japan

The distinguished features of Kampo medicine, which have been built upon the databases of evidence-based research and clinical trials in Japan, will be presented. The origin of these modern systems comes from the two Chinese classical literatures, "Discussion of Cold Damage" and "Essentials of the Golden Cabinet." Therefore this presentation will be beneficial and instructive for those AOM practitioners who are working to build, strengthen, and promote the evidence-based herbal medicine in the U.S. This presentation consists of three clinical case reports. 1. Biomedical indications of the formula, Wulingsan, to the cases of headache, brain edema, chronic subdural hematoma, acute gastroenteritis and so on. 2. Applications of Wulingsan to the emergency medical-care such as the case of severe edema of whole body. 3. Clinical applications of Wulingsan to the case of arrhythmia caused by water stagnation.

Traditional Chinese Medicine for Ischemic Stroke: A Systematic Review and Meta Analysis

Pei J, Liu Z, Yu L, Shanghai University of Chinese Medicine

Purpose: The aim of this study was to systematically review the existing clinical evidence on TCM for ischemic stroke. Methods: All RCT TCM trials for ischemic stroke from 1998-2008 were searched. The CONSORT and STRICTA statements were used to assess the literature quality and Review manager 4.2 to draw forest plots and funnel plots. Random effects model was applied to heterogeneous data. **Results**: 31 trials involving 3743 patients were included. Among them, 15 trials took acupuncture therapy, 24 trials were in-patient research. Thirteen trials tested Effective Rate of Motor Recovery (Relative Risk [RR] 1.20, 95% confidence interval [CI] 1.04 to1.39); 6 trials tested NIHSS (weighted mean difference [WMD] -2.04, 95% [CI] -3.01 to-1.06); 5 trials tested Functional Recovery using BI (WMD 9.85, 95% [CI] 4.98 to14.72); 3 trials tested the effective rate of Aphasia (Relative Risk [RR] 1.35, 95% confidence interval [CI] 0.87 to 2.09); 4 trials tested Effective Rate and Post Stroke Depression, PSD (Relative Risk [RR] 1.21, 95% confidence interval [CI] 1.09 to1.33); 6 trials tested PSD Recovery using HAMD (WMD -0.75, 95% confidence interval [CI] -4.7to3.21); Four trials tested the Cognitive Function Recovery using MMSE (WMD 1.93, 95% confidence interval [CI] 1.19 to 2.66). **Conclusions**: Traditional Chinese medicine therapy was effective on motor function rehabilitation (including motor recovery rate, NIHSS evaluation and BI evaluation and Cognitive Function Recovery), but ineffective on Aphasia recovery. The effectiveness on PSD recovery was not certain. Further randomized controlled trials are needed. Acknowledgments: Supported by the grants from the Key Projects Foundation, State Administration of Traditional Chinese Medicine, and the Key Project of Shanghai Public Health Bureau, Number: 2010003.

Effect of Acupuncture on CD4+CD25+ Regulatory T Cells in Tumor-Bearing Mice

Pei J, Fu A, Liu Z, Shanghai University of Chinese Medicine

Objectives: To investigate the molecular mechanism of acupuncture in modulating tumor immunosupression by observing CD4+CD25+ regulatory T cells and the JAK-STAT5 signal transduction in the H22 tumor-bearing mice. **Methods:** Balb/c mice were randomly divided into the normal control group, the tumor-control group, the moxibustion treatment (Moxa) group and electro-acupuncture treatment (EA) group. The tumor growth and survival rate were observed, the number of CD4+CD25+ regulatory T cells was counted, and the mRNA and protein expression of JAKl, JAK 3, STAT5a, STAT 5b were detected by RT-PCR and Western blotting analysis. **Results**: There was a significant decrease of tumor growth and an increase of survival rate in the Moxa group and EA group comparing to the tumor-control group. The number of CD4+CD25+ regulatory T cells decreased in the EA group and were increased in the Moxa group compared to the tumor-control group.

The JAK3 mRNA expression of CD4+CD25+ regulatory T cells in the EA group increased compared to the control group. The STAT5a mRNA expression decreased in Moxa group and EA treatment group compared to the tumor-control group. Significant decreased protein expressions of JAK1, JAK3, STAT5a and STAT5b were observed in the Moxa group and EA group compared to the tumor-control group. **Conclusion**: Acupuncture treatment can suppress the tumor growth and increase of survival rate of the tumor-bearing mice. Such effects may have a close relation to the regulation of JAK-STAT signal transduction in the CD4+CD25+ regulatory T cells. Acknowledgement: Supported by the grants from the Key Projects Foundation, State Administration of Traditional Chinese Medicine, and Shanghai Leading Academic Discipline Project, Project Number: S30304.

The Effect of Acupuncture Stimulation on Isokinetic Knee Exercise

Kaneko Y, Furuya E, Sakamoto A, Kuretake Gakuen, Oriental Clinical Laboratory

PURPOSE: To examine the effect of acupuncture stimulation for muscular output. **METHOD:** Biodex System3 was used for iso kinetic exercise of the knee extension/flexion. The angular velocity was 60 degree/sec and subjects performed 5 sets of 30 repetition of unilateral knee exercise between 3 minutes break. Sixteen subjects were randomly divided into 2 groups for receiving acupuncture stimulation, either on BL23, BL24, BL25, BL26 and BL32 with thumbtack needle(TN) into 0.6mm depth, or BL24 and BL26 with regular needle(RN) into 20mm depth prior to the exercise. Acupoints were determined where same level of spinal nerve innervates as quadriceps and hamstrings. Subjects with TN performed exercise with TN remained on their skin. The same exercise without any stimulation was performed as control (CONT) on the other side of the stimulated side. Peak torque (PT), total work (TW), and mean power output (MP) were evaluated. RESULT: For intragroup comparison, PT, TW, and MP of 5th set were decreased compared to 1st set in CONT ($p<0.05$) at flexion exercise. TW was decreased compared to 1st set in TN and RN ($p<0.05$). For intergroup comparison, PT, TW, and MP of RN were decreased compared to CONT at 1st set of extension exercise ($p<0.05$). MP of RN were decreased compared to TN at 5th set ($p<0.05$). **DISCUSSION and CONCLUSION:** It was suggested that the decreased muscular output were caused from deep acupuncture stimulation into the muscle with RN. The continuous shallow stimulation to the skin with TN during exercise might increase the muscle blood flow by somato-autonomic reflex and sustain mean power output.

Dense Cranial Electroacupuncture Stimulation (DCEAS) for Major Depressive Disorder: Randomized Controlled Trials

Zhang Z-J, School of Chinese Medicine, University of Hong Kong

Our meta-analysis suggests that acupuncture may have therapeutic benefits in alleviating depressive symptoms. Most recently, we completed two separate controlled trials of dense cranial electroacupuncture stimulation (DCEAS), a novel acupuncture therapy, in patients with major depressive disorder (MDD). In a single-blind, sham-acupuncture controlled trial, 59 MDD patients randomly received 9 sessions of sham or active DCEAS in 21 days while having selective serotonin reuptake inhibitors (SSRIs). A significantly greater decrease of the 17-item Hamilton Depression Rating Scale (HAMD-17) score was present as early as at Day 4 in active DCEAS treatment compared to sham DCEAS ($p = 0.030$). Active DCEAS also produced a significantly greater reduction of the Self-Rating Depression Scale (SDS) score at Day 21 than sham DCEAS ($p = 0.021$). In another randomized, waitlist-controlled trial, 78 MDD patients received 10-20 mg/day paroxetine (PRX) for 6 weeks and 44 of them were randomly selected for 18 sessions of DCEAS treatment. A significantly greater decrease of HAMD-17 score was observed as early as at Week 1 and throughout endpoint in DCEAS-treated patients compared to waitlists ($p \leq 0.006$). DCEAS-treated patients also experienced strikingly greater improvement on their depressive symptoms at Week 1 compared to waitlist controls, as evidenced in SDS score ($p = 0.000$). The clinical response rate was 78.4% (29/37) in acupuncture-treated group, significantly greater than the waitlist group with 51.5% (17/33) ($p = 0.035$). These data suggest that additional DCEAS could accelerate onset of antidepressant effects of SSRIs and produce superior efficacy in MDD patients.

The Experimental Study on the Relationship of Acupuncture Target Efficacy of PC6 and Heart Ischemia

Dong G, Dong H, Liu M, The YueYang Affiliated Hospital of Shanghai University of Traditional Chinese Medicine

Objective: To prove the relationship of acupoint and organ, and the efficacy of acupuncture based on acupoints according to this experimental study on acute heart ischemia rabbits with electro-acupuncture on PC6. Method: 32 healthy New Zealand rabbits were selected into 4 groups in this study: normal group, sodium chloride injection group, heart ischemia group, and acupuncture group. Heart ischemia model on rabbits were duplicated by continuous PPI auditive vein injection. This study applied the technique of microdialysis and ICP-OES. Collected the extracellular fluid in PC6 and observed the AST, CK-MB, CK, LDH, α-HBD, ionized calcium. Observed the changes of ECG. Took tissue of PC6 and cardiac muscle to observe the changes of energy metabolism under microscope and electron microscope. **Result:** 1. Acupuncture can change the ECG of heart ischemia rabbits by increasing the HR and improve the ST line ($P<0.05$). 2. Acupuncture can decrease the AST,CK-MB, LDH ($P<0.05$) and increase the ionized calcium ($P<0.05$), but no obvious changes on CK, α-HBD. 3. The structure of bioblast was changed after the PPI injection ($P<0.05$), and the energy metabolism was improved after acupuncture under electron microscope. **Conclusions:** 1. Pathologic changes of organ can be reflected through acupoint. 2. Stimulation on acupoint can adjust the function of corresponding organ. This maybe the core of acupuncture treatment. 3. Acupoints is the starting factor of acupuncture efficacy, which can change the corresponding organ and adjust the function. It shows acupoint is related with organ.

An Experimental Study on Mechanism of Acupuncture on ST36 and BL23 for Calpain II of Sciatic Nerve for DPN Rats

Dong H, Zhang Q, Zhang Y, The YueYang Affiliated Hospital of Shanghai University of Traditional Chinese Medicine

Objective: To discuss the mechanism of electro-acupuncture for calpain II of sciatic nerve for DPN rats. Medthods: The artificial DPN mock-rats were duplicated by streptozotocin (STZ) inducement. The mock-rats were randomized into model group, non-point group, and electro-acupuncture group and compared with others. The electro-acupuncture group had treatment on ST36 and BL23. The nerve conduction velocity (NCV) of DPN-rat by neuro-electrophysiology was detected with the technique of immunity and fluorescent quantitative PCR. And the albumen and mRNA expression of Calpain II was detected also. **Results**: The MNCV and SNCV of DPN rats were significantly slower than normal group after 4 weeks ($P<0.01$). The Calpain II and mRNA expression is decreased than normal group; the MNCV and SNCV was significantly improved in electro-acupuncture group compared with model group ($P<0.01$), but no significant different showed between the non-point group and the model group; the Calpain II and mRNA expression was increased significantly in the electro-acupuncture group, compared with the model group ($P<0.01$), but no significant difference showed between the non-point group and the model group. Conclusion: Acupuncture on ST36 and BL23 can increase the Calpain II and mRNA expression and improve the MNCV and SNCV of sciatic nerve. This is one of the mechanism of acupuncture on ST36 and BL23 for diabetes polyneuropathy(DPN). It shows the specification of meridian-point.

Efficacy of Point-Through-Point Scalp Acupuncture on NAA and Cho of Brain Tissue in Intracerebral Hemorrhage Rabbits

Wang F, Dong G, Lei H, YueYang Hospital of University of Chinese Medicine, Shanghai

Objective: To observe the efficacy of point-through-point scalp acupuncture on NAA/Cr and Cho/Cr of brain tissue of intracerebral hemorrhage(ICH) and explore its mechanisms in resisting neural lesion based on the experimental study on acute ICH rabbits by Magnetic Resonance Spectroscopy. Methods: A total of 30 male New Zealand rabbits were randomized to normal group, model group, and acupuncture group, with 10 cases in each group. Self-arterial injection method has been used to copy the ICH rabbit model. Acupuncture group is treated by electro- Quantitative analysis of 1H-MRS(Magnetic Resonance Spectroscopy) is used to observe the content of NAA,Cho and Cr in perihematoma tissues in 2h, 3d and 7d after ICH model successfully established. **Results**: Compared with normal group, NAA/Cr level decreased significantly after hematoma is formed (P<0.05), while Cho/Cr level increased (P<0.05). After acupuncture therapy, NAA/Cr level was significantly higher than model group (P<0.05), while Cho/Cr level was lower (P<0.05). Conclusion: In ICH, reversible damage occurs in hematoma region. Point-through-point scalp method can greatly accelerate neural lesion repair process.

Review and Analysis on Researches of Acupoint Effect with Application of Magnetic Resonance Imaging

Lei H, Dong Q, Wang F, Yueyang Hospital of University of Chinese Medicine, Shanghai

Acupoint is the main factor to realize the effect of acupuncture. Its function will be the first question on acupuncture mechanism. With the deeper and deeper researches on acupuncture mechanism, it has been connected closely with Radiology and a new subject has been developed—Imaging Pharmacology. This is a summary on application of MRI on effect of acupoints. It analyzes the research result of application of MRI in such fields as single acupoint, combined use and the specificity of acupoints, the correlation between acupoints and brain functions, and the difference between acupoints and non-acupoints, evaluate the functions of this kind of studies, as to the advantages, problems and depicted the prospect of its development currently.

Acupuncture Reduces Hypersensitivity and Edema in Rats with Knee Monoarthritis Induced by CFA

Filho F, Silva M, Moré A, Center of Physiological Sciences, Federal University of Santa Catarina, Brazil

Purpose: The present study was undertaken to examine the effect of manual acupuncture (MA) on a rat model of knee monoarthritis. Methods: 18 male Wistar rats (250-300 g) were distributed into three groups (n = 6): saline, CFA and CFA + Acupuncture. Inflammation and hypersensitivity were induced by injecting complete Freund's adjuvant (CFA) into the right knee of the rat. Mechanical hypersensitivity was evaluated through paw withdrawal frequency with 4.0 g von Frey filaments. Thermal hypersensitivity was evaluated in the acetone model (0.05 ml sprayed 3 times onto the plantar aspect of the hind paws). Antiedematogenic effect was assessed by comparing the diameter of the injected with contra-lateral knee using a caliper. MA (30 seconds of needle manipulation, 10 minutes of needle retention, no restrain of the rat) was applied at the acupoints ST36 and SP6 at the rat's right hind limb. Acupuncture was performed 3 times per week on alternate days for 21 days, for a total of

C. A. I. CORPORATION

"EXPERT"
Acupuncture Needles

"LEKON"
Acupuncture Needles

"CLOUD & DRAON"
Acupuncture Needles

"EXPERT"
Korean Style Needles

"SEIRIN"
Japanese Acup. Needles

Pearl Beauty Capsules

Great source of amino acids, small molecule peptide, miner als, calcium, vitamin B, taurine, porphyris and metal-porphyrins.

60 capsules NL-1016

WEIGHT LOSS *100% natural*

- Improves metabolism
- No side effects
- Easy and effective
- Only 1 capsule a day

E. Z. SLIM PRETTY. SLIM

BIO-C AGECOM

LINGZHI • *Improves blood circulation and metabolism.* • *Strengthens immune system.*

100% LINGZHI SPORE POWDER

1g x 50 bags

NL-1018A

LINGZHI LIFE ENERGY

500mg per capsule
100 capsules

NL-1018B

T. Y. HERBAL PLASTER

Long lasting pain relief and speedy recovery.
活血・化瘀・消腫・止痛

NH-2810

DETOX ENERGY SPA NK-4001

GUANG CI TANG *Herbal Products*

NJ-1030

LEKON SELF HEATING PATH

4 Channels NE-1013A

6 Channels NE-1013B

LEKON NEEDLE WARMER & STIMULATOR

NE-1001A

ACU. STIMULATOR (1801)

808I NE-1002A

808II NE-1002B

MULTIFUNCTION HEALTH DEVICE

Step Stool MB-1020C

Revolving Stool MB-1012D

STARTING AT $99

MB-1003

PORTABLE TABLE

STARTING AT $199

MB-1002C

MASSAGE TABLE

4 WAYS TO ORDER

ON LINE
www.caicorporation.com
info@caicorporation.com

BY PHONE
626.448.6622
866.224.8326

BY FAX
626.448.6633
877.224.8326

IN STORE
10166 Rush Street
S. El Monte, CA 91733

8 interventions. **Results**: MA-treated rats significantly reduced mechanical hypersensitivity from the first to the sixth treatment (44±8 to 80±3%) but did not reverse thermal hypersensitivity as compared to CFA-control rats. MA also reduced the edema from the first to fifth treatment. **Discussion:** Knee monoarthritis induced with CFA is a persistent inflammatory pain model. Our results show that MA-treatment reduced the period of the rats recovery when pain (hypersensitivity) and inflammation (edema) parameters were analyzed. **Conclusion:** MA has antihypersensitivity (mechanical) and antiedematogenic effect in the model of monoarthritis induced by knee injection of CFA in rats.

Can "Standardized" Acupuncture Treatment Recipe Achieve Similar Effectiveness When Practiced by Different Acupuncturists? A Research Protocol Based on an Ongoing Randomized Controlled Trial

Fei Y, Liu J, Guo Z, Beijing University of Chinese Medicine

Objective: Explore how the ability of "giving treatment" influences the clinical effectiveness of different acupuncturists when the differences of their ability of making diagnosis and prescriptions are under control. Background: Many people believe that acupuncture expertise plays an important role in the clinic. The expertise may includes the ability of (1) diagnosis (2) deciding acupoints and needling methods (3) "giving treatment"- the techniques of identifying acupoints on patients, practicing needling methods, and communicating with patients. We're conducting a randomized controlled trial (RCT) to see whether different acupuncturists will have different effectiveness in lung cancer patients with chemotherapy induced nausea and vomiting (CINV). By the end of this trial, a best-effectiveness acupuncturist (BEA) will probably be found among the three participated acupuncturists. Methods: Hospital-based RCT. Lung cancer patients with CINV will be randomized into three acupuncture groups and one control group. The same three acupuncturists in the ongoing RCT as introduced above will participate, and one will be selected as BEA, who will do all the diagnosis and prescriptions (acupoints and needling methods), and share this with the other acupuncturists as a "standard" acupuncture treatment recipe before randomization. Hand needling will be given to each acupuncture group by one acupuncturist consistently. The control group will not have any treatment for nausea or vomiting. Tropisetron will be given to all patients if severe vomiting occurs. No other intervention permitted. **Outcomes:** acute and chronic nausea and vomiting, use of Tropisetron and adverse events. Patients will not know who is making diagnosis and prescriptions.

Acupuncture in the Inpatient Acute Care Setting: A Pragmatic, Randomized Control Trial

Painovich J, Herman P, Cedar Sinai Medical Center

Introduction: The purpose of this study was to evaluate the acceptance and effectiveness of acupuncture in a hospital setting. **Methods:** This 18-month pragmatic randomized controlled trial used a two-tiered consent process for all patients admitted to the hospital's acute care unit by the study's physician groups. The primary study comparison was between the groups randomized (using biased-coin randomization after initial consent) to be offered acupuncture or not. The primary outcome was length of stay (LOS). Other measures include costs, and self-reported anxiety, depression, health status, and patient satisfaction. **Results**: A total of 383 patients consented to the study. Of these, 253 were randomized to be offered acupuncture and 130 were not offered acupuncture. Of those offered acupuncture, 173 (69%) accepted and were given daily acupuncture treatments until discharge. On average, patients offered acupuncture had a longer LOS (4.9 versus 4.1 days) than those not offered acupuncture (p=.047). Adjustment for the diagnosis and severity mix in each group reduced this difference and its significance (p=.108). No significant differences were found between groups in terms of costs, and self-reported anxiety, depression, health status, and patient satisfaction. Patients who were more anxious (p=.000) or depressed (p=.017) at admit tended to more often accept acupuncture when offered. **Conclusion:** Acupuncture is accepted by a majority of hospitalized acute care patients as an adjunctive treatment modality. However, in this already short-stay population, it was unable to reduce length of stay. Given evidence gathered here as well as through other inpatient research, there may be areas in the hospital where acupuncture may prove useful.

Treatment Using Acupuncture Point Heart 7 Decreases Anxiety Behavior Through Neuropeptide Y in the Amygdala

Sajdyk T, Fitz S, Haggard S, Indiana University School of Medicine

Purpose: The purpose of this study was to verify that administration of acupuncture at Heart 7 (HT 7) would decrease anxiety in a rodent model of anxiety and determine if Neuropeptide Y (NPY), a key neurotransmitter involved in the anxiety response, was playing a role in the anxiolytic-like effects. **Methods:** Male Wistar rats were implanted with bilateral cannulae into the basolateral amygdala. The animals were then divided into several treatment groups: single or multiple treatment of HT 7 or sham point (with and without restraint stress) and single treatment with a 30 minute pretreatment of either vehicle or an NPY Y1 antagonist. Animals were assessed for anxiety-like behavior in the social interaction test or the elevated plus maze test. **Results**: One treatment of acupuncture at HT 7 can elicit an anxiolytic-like response which appears to be mediated by NPY, specifically, the Y1 receptor. Our results also suggest that 5 treatments at HT 7 can induce long-term resiliency to stressful events, such as restraint stress. **Discussion:** NPY is a key neurotransmitter involved in the physiological response to stress. HT 7 is a common acupuncture point for treating individuals with symptoms of anxiety. The results from our preclinical model of stress suggest that part of the reason the treatment is effective is because it induces the release of NPY within the BLA. **Conclusion:** Acupuncture treatment at Heart 7 may produce its anti-stress effects by inducing the release of NPY within the BLA, a key brain area for regulating emotional responses.

Effects of Chemicals Emitted Through Moxibustion on Monoamine Neurotransmitters and Learning and Memory Behavior of SAM

Zhao B, Meng X, Xu H, School of Acupuncture and Moxibustion, Beijing University of Chinese Medicine

Objective: To investigate the effect of the chemicals emitted through moxibustion on monoamine neurotransmitters content and the learning and memory behavior of senescence accelerated mice (SAM-P/8). Methods: Fifty male SAM (6 months) were used as senescence animal model, 10 of them are senescence accelerated mouse/resistance 1 (SAM-R/1) and were set as control group; the other forty SAM-P/8 were randomly divided into four groups of ten: model group, smoke-inhalation group, smokeless moxibustion group and the conventional moxibustion group. Passive-avoidance test were performed before and after moxibustion therapy on Guanyuan (RN4) acupoint to test the mice's learning and memory ability. Enzyme-Linked Immunosorbnent Assay (ELISA) was used to determine the 5-hydroxtryptamine(5-HT), noradrenaline (NE), and dopamine (DA) level in mice brain. **Results**: Each group was compared to the model group, and all groups show an increase in monoamine neurotransmitters content in the brain ($P<0.05$ or $P<0.01$), an increase in the incubation period before entering the black- box ($P<0.05$ or $P<0.01$) and an improvement in learning and memory ability. **Conclusion:** Chemicals emitted through moxibustion can significantly increase the monoamine neurotransmitters level and improve the learning and memory ability, which is possibly due to one of moxibustion mechanisms on the memory ability of senescence accelerated mice.

THANK YOU TO OUR CONFERENCE 2011 SPONSORS

Whole Medicine: Teaming Up for Our Patients

GOLD SPONSORS

American Acupuncture Council

Golden Flower Chinese Herbs

Sokenbicha Tea

May 12 - 15, 2011
Baltimore, Maryland
Sheraton Baltimore City Center Hotel

For more information or to register visit:
aaaomonline.org/wholemedicine

Exhibitors

ActiveHerb Technology, Inc.
ACUCLAIMS
Acupuncture Media Works
Acupuncturists Without Borders
American Acupuncture Council
American Healing Technologies
Anfala
Bio-Mat Company
Blue Poppy Enterprises
Crane Herb
Evergreen Herbs
Far East Summit
Golden Flower Chinese Herbs
Golden Sunshine International
Health Concerns
Health Source Products
Jessica Kingsley Publishers/Singing Dragon
Kairos Institute of Sound Healing/Acutronics
Kampo/Schwabe North America
Kan Herb Co.
KHT Systems
KPC
Lhasa OMS, Inc.
Maanshan Bond Medical Instruments Co., Ltd.
Mayway Corp.
Natura Health Products
NCCAOM
Oregon College of Oriental Medicine
Peoples Medical Publishing House
PRO D Seminars
Seirin-America, Inc.
SIG Medical Supply
Standard Process
Tronex Pharmaceutical
UPC Medical
Worsley Institute

SEIRIN®
The Painless One™

5 reasons why practitioners put their trust in SEIRIN®

1. SEIRIN **invented the single use disposable needle** in 1978, making the delivery of acupuncture safe and convenient for practitioners.

2. Only the **highest grade raw materials** are used as inputs into a SEIRIN needle. The specs are reviewed for each material before an item is accepted for inclusion in the process.

3. SEIRIN maintains the world's only **100% automated and integrated medical-grade manufacturing facility**, producing an end result that is safe, smooth, clean and perfectly sharp.

4. SEIRIN's **proprietary tip is designed to gently push aside skin molecules** minimizing tissue damage, which aids in painless insertion.

5. Each needle is **inspected using a computer controlled eye** that rejects any needle outside SEIRIN's tight tolerances, ensuring each needle is identically perfect.

When it comes to patient safety and satisfaction, put your trust in SEIRIN.

www.SeirinAmerica.com