

*German-Chinese Research Foundation
for Traditional Chinese Medicine e.V.*

德中医研究协会



Scientific approaches to Chinese Medicine

8th International Workshop on TCM
03 – 05 October 2014
Porto

Abstracts



Heidelberg School



German Society of TCM



ISCMA

Heidelberg School Editions 2014 - ISBN 978-3-939087-20-5

Artemisia vulgaris L. :ABA was only observed with the oil preparation; activity was higher for *E. faecalis* with 20mL.

Rhizoma coptidis : No activity was observed for gram negative species. The oil had activity for all gram positives. Infusion and decoction at 20mL showed ABA against *Staphylococcus aureus*.

Radix scutellaria tests revealed no ABA against all species.

Conclusions

This study revealed that TCM herbs antibacterial activity depends on the type of preparation and concentration. It was found antibacterial activity of the Artemisia oil in all bacterial species and the Coptidis oil on gram-positive bacteria. Activity was also observed in infusion and decoction of Coptidis against *Staphylococcus aureus*. Scutellaria had no antibacterial activity. Therefore, these differences should be taken into account when performing laboratorial studies and when clinically select the most appropriate phytotherapy treatment. Further studies will be necessary to obtain the best knowledge of the properties of these plants, such as the synergistic effect between them as well as different extracts concentrations.

Eucalyptus globulus L. extract as an antifungal agent against *Candida* species

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Hundreds of botanical preparations have been prepared and used for a wide variety of conditions. Different studies have been carried out towards to confirm the effective multitude of health benefits provided by medicinal plants [1]. In parallel with these studies, in the last years, high rates of opportunistic fungal infections have been observed, namely involving *Candida* species. *Candida albicans* is the most common but, currently, other non-*Candida albicans* *Candida* (NCAC) species have also been associated [2]. This is linked with increasing rates of antifungal resistant species, in part due to the overuse of antimicrobial agents, making these drugs ineffective, not only at higher doses but also even using an antifungal drug-combination [3]. Thus, alternatives to the current antifungal agents are necessary, namely based on natural matrices. *Eucalyptus globulus* L. (cider gum) belongs to the Myrtaceae family and is extensively used mainly as expectorant, febrifuge, in respiratory tract affections, antiseptic in wounds, burns, ulcers and cancer [4]. Antifungal activity of its essential oils [5] and ethanolic extracts [6] was already reported but, to the author's knowledge, no studies are available using hydroalcoholic extracts. In this work, the antifungal properties of *E. globulus* methanol:water (80:20, v:v) extract were evaluated against nineteen *Candida* strains (from the species: *C.albicans*, *C.glabrata*, *C.parapsilosis* and *C.tropicalis*). The results of this experiment evidenced a strong antifungal potential of *E. globulus*, being effective against seventeen *Candida* strains and the inhibition zones ranged between 9 and 21 mm. The minimal inhibitory concentrations (MICs) determined varied from 0.1875 and 1.5 mg/mL for the majority of *Candida* species, except for *C.albicans* strains (MICs>1.5 mg/mL).

In this sense, further studies are necessary in order to elucidate the involved mechanisms of action as well as to determine the main responsible active principles for the studied bioactivity, in terms of chemical composition.

- [1] Rubió L, Motilva M-J, Romero M-P. (2013). *Crit Rev Food Sci Nutr.* 53, 943–53
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- [3] Kanafani ZA, Perfect JR. (2008). *Clin Infect Dis - Antimicrob Resist.* 46, 120–8
- [4] Khan IA, Abourashed EA. (2010). 3rd ed. N.J.: John Wiley & Sons, Inc.
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- [6] Khan R, Islam B, Akram M, Shakil S, Ahmad A, Ali SM, Siddiqui M, Khan AU. (2009). *Molecules.* 14, 586–97

Functional Changes with Qigong Practice: Experimental Case 1

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Background

Qigong is a traditional vegetative biofeedback therapy that combines postures, movements with breath control and a special mental state of “awareness”. Qigong promotes the “circulation of qi” in the human body, thereby improving and strengthen the overall health state (homeostasis). TCM holds that “qi” cannot be seen and is immaterial, while the effects of “qi” may be seen in the functional so-called organ patterns which include functional changes of the conduits or “meridians”. Objective detection methods to evaluate the physical effects of Qigong is the prerequisite for the development of objective clinical study designs.

Objectives

Documentation of a phenomena that was observed during *Qigong*: the change of skin temperature, an expression of vegetative changes of the tissue, regarded as a change in microcirculation.

Experimental

Thermograms variables: FT - Final temperature (tip of middle finger - TMF); AT - Activation time (time to change 1°C TMF); FTPc8 - Final temperature on Pc8 (*Laogong*); HR - Heating rate (°C.s⁻¹). Measurements considering two cases: Two experienced Qigong practitioners (Case 1); Group of seven children (Case 2).

We used Infrared Camera FLIR model A325, with Thermal sensibility 0,07 °C and Precision 2 %, and ThermoCAM Researcher Pro 2.9, taking 1 photo for each 10 seconds

Results

Thermography indicated changes of local microcirculation during the exercises.

Qi sensation starts when microcirculation rises. This was compatible with Heidelberg model:

Friday, 03 Oct 2014

08:00-09:15 Registration | **09:15** Opening ceremony

09:15 Representative of the University of Porto
Representative of ICBAS
Representative of AEICBAS
Opening address and welcome

09:30 Prof. Ding Guanghong President of DCFG-TCM Shanghai - **Welcome and keynote lecture:**
How to get the curative effect in acupuncture therapy: scientific bases

09:50 Prof. J. de Sousa Lobo FFUP, Porto - Integration of TCM into superior education

10:05 Prof. Johannes Greten Heidelberg, Porto - **Keynote lecture:**
The Future of TCM Depends on Research: The Role of the European Master Programme

10:30 Musical Surprise - Dr. Wolfgang Ellenberger

COFFEE BREAK

11:00 Session 1 | Clinical Studies and Concepts

Chair: Mafalda Reis, Porto / Mark Bovley, London

11:00 Irene Pais, Porto - Effects of Acupuncture in Leukopenia, Neutropenia, NK and B Cells in Cancer Patients Undergoing Chemotherapy

11:15 Pei Jian, Shanghai - Clinical Study on Electroacupuncture for Chronic Neck Pain

11:30 Maria João Santos, Porto - Treatment of Obstructive Sleep Apnoe (OSA) by Heidelberg Scalp Acupuncture

11:45 Chen Ke, Shanghai - Effectiveness of Moxibustion Treatment in Osteoarthritis of the Knee: A Randomized, Double-Blinded, Placebo-Controlled Clinical Trial

12:00 Cláudia Sousa, Aveiro - Self-Management of Work-Related Musculo-Skeletal Disorders

12:15 Ge Linbao, Shanghai - Treating Winter Disease in Summer

12:30 Giovanna Franconi, Rome - Increasing Male Fertility by TCM

LUNCH BREAK

14:30 Session 2 | Pharmacology

Chair: Paulo Lobão, Porto / Pei Jian, Shanghai

14:30 Thomas Friedemann, Hamburg - Neuroprotective Effect of Coptis Chinensis (Franch.)

14:45 Wendy Hsiao, Macau - The Impacts of Herbal Saponins on Gut Microbiota and Cancer in a Colorectal Cancer Mouse Model

15:00 Luis Alves, Porto-VN Gaia - Antioxidant Properties on the Tips of Several Medicinal Plants: "Three Stars Winner of Great Taste Awards"

15:15 Natália Martins, Braga - Eucalyptus globulus L. extract as an antifungal agent against Candida species

15:30 Silvia Schwarz, Shanghai - Viral Ion Channels as Target for Chinese Herbal Medicine

15:45 Xu Yinfang, Shanghai - Sensitivity of Different Isoforms of the Na, K Pump to Bufadienolides

COFFEE BREAK

16:10 Session 3 | Moxibustion and its Molecular Mechanisms

Chair: Begoña Criado, Gandra / Wendy Hsiao, Macau

16:10 Wolfgang Schwarz, MPI Frankfurt/Shanghai - **Keynote lecture:**
TRPV Channels in Mast Cells as a Target for Low-Level Laser Therapy

16:30 Wu Fan, Shanghai - Preliminary Study on Pain Reduction of Monosodium Iodoacetate-Induced Knee Osteoarthritis in Rats by Carbon Dioxide Laser Moxibustion

16:45 Wang Lina, Shanghai - Heat Modulates ATP Mobilization of Mast Cells in vitro: A Putative Mechanism for Moxibustion

17:00 – 20:00 Workshop
Yamamoto Scalp Acupuncture in the Treatment of Infertility and Parkinson's Disease
Dorothea Zeise-Süss

17:00 – 19:00 Port Wine
Cellar Tour

19:00 – 20:00 General
Assembly Meeting Sino-German Research and Sponsors Society (Members Only)

20:15 Welcome Evening with Portuguese Food and Wine
Extra fee will be charged | Chinese Participants invited by HSCM Lda

Saturday, 04 Oct 2014

09:00 Session 4 | Assessing Effects by Heart Rate Variability

Chair: Nuno Correia, Porto / Wang Lina, Shanghai

09:00 Litscher, Gerhard Graz, Austria - **Keynote lecture:**
The Science of Acupuncture – Evidence Based Medicine

09:25 Wang Guangjun, Beijing - Acupoint Laterality – Assessed by HRV

09:35 Renato Oliveira, Porto - Anxiety Self-Management by Qigong - Objectifying Effects by HRV

10:00 Session 5 | Engineering and TCM

Chair: Joaquim Gabriel, Porto / Ding Guanghong, Shanghai

10:00 Huang Meng, Shanghai - A Novel Online System to Detect Fast Chemical Signals in the Acupoint

10:15 Joaquim Gabriel, Porto - Infrared Thermography and Electric Potential Measurements Measurability of Microcirculation Changes

10:30 Paula Ferreira, Aveiro - Study of the Effects of Acupuncture on the Clinical Signs of Hip Dysplasia in Dogs

11:00 João P. Vilas-Boas, Porto - Biomechanic and Innovative Methodology for Health Research

COFFEE BREAK

11:10 Session 6 | Scientific Methodology

Chair: Gerhard Litscher, Graz / Shen Xueyong, Shanghai

11:10 Silvério Cabrita, Coimbra - Investigation on Acupuncture: Animal and Human Experimentation – Clinical Cases

11:25 Luis Matos, Coimbra - Functional Changes with Qigong Practice: Experimental Cases

11:40 Leonel Duarte, Porto - Introducing Qigong in Research: A Prospective Randomized Placebo-Controlled Trial on School Kids Attention Levels

11:55 M^a Graça Campos, Coimbra - Phytotherapy and Medical Interaction: Methodology and Clinical Cases

12:10 Susana Seca, Coimbra - The Meaning of Homogenization of Patient Symptoms by Chinese Diagnosis as an Inclusion Criterion

12:25 Alcino Duarte, Porto - Immediate Acupuncture Effects on Low Back Pain: a Randomised, Controlled, Double-Blinded Clinical Trial

12:40 Hui Henny, Hong-Kong - Chinese Medicine Research Methodology Training Programme for Chinese Medicine Practitioners in Hong Kong

12:55 Karla Pinto, Porto - Effects of Moxibustion on Milk Production

LUNCH BREAK

14:30 Session 7 | Acupuncture in Sports and Rehab

Chair: Antonio Moreira, Rio Maior / Wolfgang Schwarz, Shanghai

14:30 Zhu Wenjun, Cologne - Qi as a Driving Force for Movement and Healing – TCM Combination Therapy of Musculoskeletal Pain

14:45 Nuno Sousa, Porto - The Influence of Acupuncture on Vertical Jump Performance in Volleyball Players

15:00 Diogo Bernardo, Porto - The Influence of Acupuncture in Lactate Removal After Maximum Exercise - Study Design and Clinical Cases

15:15 Ricardo Cardoso, Porto - Effects of Acupuncture on Delayed Onset Muscular Soreness

15:30 – 16:00 Poster Evaluation Tour

16:00 - 18:00 Workshop

Heart Rate Variability
Renato Oliveira / Nuno Correia

16:00 – 18:00 Boat Tour

18:00 - 19:30 Workshop
Heidelberg Scalp Acupuncture
Maria João Santos / Johannes Greten
Immediate Effects by a Simple Methodology

17:00 - 20:00 Workshop
Photomedicine and Laser Acupuncture - New Therapeutic Options
Detlef Schikora

20:30 Poster Award Ceremony and Celebration for Invited Guests

Sunday, 05 Oct 2014

09:00 Session 8a | Treatment of Emotions by TCM

Chair: **Manuel Laranjeira**, Porto/Ge Linbao, Shanghai

09:00 Johannes Greten, Porto - Keynote lecture:

Four-Layered Ontology: an Integrative Treatment Concept Based on Brain Physiology, Evolutionary PT and TCM

09:25 Antonio Seiça, Coimbra - Reduction of Qigong on Burnout Symptoms in Nurses

09:40 Andreia Vieira, Porto - Lowering Anxiety of University Students Prior to the Exams by Ear Acupuncture Correlates with Tongue Changes

COFFEE BREAK

10:10 Session 8b | Treatment of Emotions by TCM

Chair: **Wei Jianzi**, Shanghai | **Jorge Machado**, Porto

10:10 Carla Paiva, Braga - Effects of Electroacupuncture on BIS and Anxiety in Anxious Volunteers: A Prospective, Randomized, Blinded Study Can We Parametrize TCM Constitution?

10:25 Cláudia Sousa, Aveiro - Effects of Qigong on Performance-Related Anxiety and Physiological Stress Functions in Transverse Flute Music School Children

10:40 Nuno Silva, Porto - Effects of Electroacupuncture on BIS and Anxiety in Anxious Volunteers: A Prospective, Randomized, Blinded Study

11:00 Closing Remarks - Roundup of the 8th International Workshop of TCM in Porto

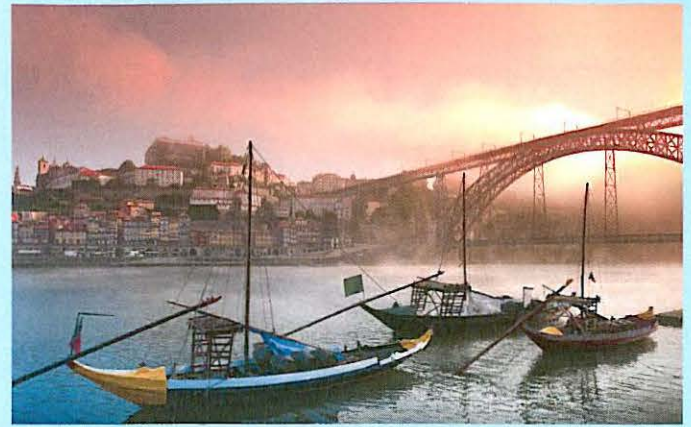
11:15 Patient's Event - What is Chinese Medicine and where it can help?

Organizing Committee:

Dra. Petra Fröschen
MSc Maria João Santos
Dr. Nuno Correia
Dra. Ana Clara Moreira
Sarah Oliveira (AEICBAS)

Scientific Committee:

Prof. Dr. Manuel Laranjeira
Prof. Dr. Jorge Machado
Prof. Dr. Henry Johannes Greten
Prof. Dr. José Pinto da Costa
Prof. Dr. João Paulo Vilas Boas
Prof. Dr. Paulo Lobão
Prof. Dr. Joaquim Gabriel
Dr. Ana Mafalda Reis



German-Chinese Research Foundation for TCM

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03 - 05 October 2014 Porto, Portugal

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Hospital Santo António – Auditorium CHP | Entrance: Rua da Restauração