

PROGRAM AND ABSTRACTS

5TH INTERNATIONAL
SYMPOSIUM FOR
JAPANESE
KAMPO
MEDICINE

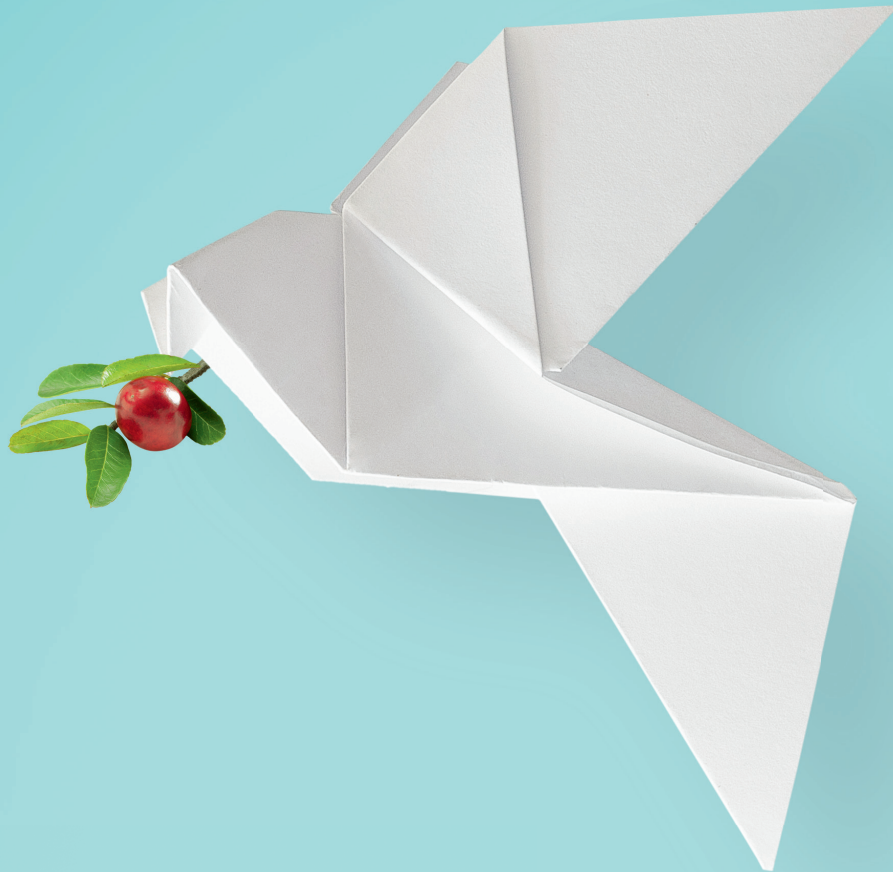
SEPTEMBER 6-7, 2019
HANN. MÜNDEN, GERMANY

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INTERNATIONAL SOCIETY for
JAPANESE KAMPO MEDICINE

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POHL BOSKAMP



PROGRAM AND ABSTRACTS

5TH INTERNATIONAL
SYMPOSIUM FOR
JAPANESE
KAMPO
MEDICINE

Friday, Sept. 6, 2019 -
Saturday, Sept. 7, 2019
Welfenschloß Hann. Münden
Schloßplatz 10
34346 Hann. Münden
Germany

Welcome Address

Silke Cameron

Symposium President, Hann. Münden

Dear Colleagues, Ladies and Gentlemen,

A cordial welcome to the 5th International Symposium for Japanese Kampo Medicine in Hann. Münden!

We chose this small city not only because it is beautiful, but also because it has a long-standing tradition for exchange of knowledge also in medicine. The subtitle of this conference is: 'Connecting Tradition, Scientific Evaluation and Individual Patient Care'. The history of Hann. Münden mirrors all this!

The city of Hann. Münden has been founded in the 12th century by Henry the Lion, member of the oldest German Dynasty: the Welfes. In Japan, this was the time of the Kamakura era and the first shogunate. As you might know, the name 'Münden' comes from the water mouth of two rivers: the Fulda and the Werra. They join to become the Weser, an important connection to the North Sea.



Hannoversch' Münden belonged to the Kingdom of Hannover / Braunschweig and Lüneburg and was an important merchant city. It had the pre-emptive right to buy the merchandise which was shipped on the rivers. And as such, it became a rich city.

In the 18th century, at the same time when Yoshimasu Todo developed the *Koho-Ha* School of Kampo Medicine in Japan, a very famous doctor also practiced in Hann. Münden: Dr. Eisenbarth. He was a well-renowned medical doctor and surgeon who performed cataract surgery and treated i.e. kidney stones. His instruments were sterilized on the open flame. Performers and acrobats distracted the patients to make them forget their pain, which was not always well-taken.

When the famous naturalist and explorer Alexander von Humboldt traveled to Hann. Münden in the 18th century, he said that it was one of the seven most beautifully situated cities in the world. So now, with you all being here, we can claim in the name of Alexander von Humboldt, that it is a good place to come together for exchange of ancient and modern knowledge in the understanding and management of disease and patient care!

As the local organizer, I would like to express my gratitude to all – from Germany and from Japan – who helped to make this symposium possible. My special thanks go to my colleague Dr. Heidrun Reißenweber-Hewel for her tremendous commitment to this event and to the Hospital Hann. Münden as co-organizer. The team with Mrs. George, Mrs. Gerling, Mrs. Jenssen and Mr. Lehnert offered a lot of extra time to provide a professional organization.

Dear participants, please enjoy your stay and many fruitful discussions. Thank you very much for coming.

Welcome Address

Heidrun Reißeweber-Hewel

President of the International Society for Japanese Kampo Medicine (ISJKM)

Dear Participants and Supporters of the Symposium,

I have great pleasure to welcome all of you to this 5th International Symposium for Japanese Kampo Medicine in the beautiful medieval town of Hann. Münden. We are delighted to have you here to participate and share in our discussions. Thank you very much for coming. Many of you have travelled long distances to be here. With participants from Japan and from ten countries all over the world, this symposium is truly an international event.

I would like to express my gratitude to all who helped to make this symposium possible, first of all to PD Dr. Silke Cameron and her team for her enthusiastic job as local organizer here in Hann. Münden. My gratitude also goes to the Japan Society for Oriental Medicine with President Dr. Takashi Ito and the German Medical Association of Acupuncture with President Prof. Dominik Irnich for their generous support and to all sponsoring partners for their contribution. Last but not least, without the kind and relentless help of our colleagues from Japan, especially Dr. Hiromichi Yasui, Prof. Keiko Ogawa and Prof. Yoshiharu Motoo, this symposium would not have been possible, thank you very much.

This is already the 5th international symposium organized by ISJKM and on this occasion we are proud to celebrate also the 10th Anniversary of our society. This symposium is already an institution acknowledged by the international community. International exchange, cooperation and friendship are even more important in these days! The world, also the world of science, is more connected than ever by digital globalization on the one hand, but is facing huge ecological, political and economic challenges on the other hand!

The title of our symposium is “Japanese Kampo Medicine: Connecting Tradition, Scientific Evaluation and Individual Patient Care”.

This topic is reflected in our program featuring a new format already on Friday afternoon with four parallel workshops and discussions with the Kampo masters on difficult clinical cases. Today we will continue in the plenary with six sessions - four oral sessions and two poster sessions - covering Kampo International, Education and Public Outreach, followed by Pharmacobotany, Crude Drug Supply and Basic Research, then in the afternoon Clinical Experience and Research, and Historical Aspects which will show us that it is still important to learn from tradition.

I am proud that you, the leading experts from Japan and the West in this field, will give an overview of new insights and will share your clinical experience. I wish us all fruitful sessions, an exchange of new ideas and a memorable time. Thank you very much.

Greeting Remarks

Takashi Ito

President of the Japan Society for Oriental Medicine (JSOM)

On behalf of the Japan Society for Oriental Medicine (JSOM) I would like to extend my sincere congratulations on the 10th Anniversary of the successful work of the International Society for Japanese Kampo Medicine (ISJKM). At the same time, I am wishing this splendid 5th International Symposium of ISJKM here in the beautiful ancient town of Hann. Münden fruitful results and all success. I would like to sincerely thank the organizers for their great commitment, especially ISJKM President Dr. Heidrun Reißweber-Hewel for her kind invitation, as well as the Symposium President PD Dr. Silke Cameron and all others involved.

At the general assembly of the World Health Organisation (WHO) this year in May, a new chapter on traditional medicine, Chapter ICD-11, was approved. This is a pivotal event that signifies the ushering of a new age for traditional medicine around the world.

Kampo Medicine in Japan has seen the most progress when used in combination with modern western medicine. Surveys indicate that 80% of western medicine physicians have experience in prescribing Kampo Medicine and that nearly all hospital departments make use of Kampo Medicine in some form. Despite the spread of Kampo Medicine, the fact remains that few physicians possess a proper understanding of traditional medicine.

We at the Japan Society for Oriental Medicine are highly interested in international projects on Kampo Medicine such as being conducted by your association's researchers. We feel privileged that we had the chance to hear a lecture by Dr. Bernd Kostner from Austria at our general assembly in June of this year, as well as a lecture by Dr. Heidrun Reißweber-Hewel from Germany at the general assembly last year. Additionally, this fiscal year, we were able to increase our modest financial support for the association.

We look forward to working towards developing further opportunities for exchange in the future. Thank you very much.



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Japanese Kampo Medicine: Connecting Tradition, Scientific Evaluation and Individual Patient Care

Friday, September 6, 2019

Geschwister-Scholl-Haus:

11:00 *Get together and Registration*

12:00 *Lunch*

Welfenschloss:

13:00 **Welcome**

13:10-14:30 **Parallel Workshops (A, B)**

(All workshops will give opportunity to introduce and discuss current key issues and open problems of the respective field of Kampo Medicine. Workshop chairs will summarize and present the main results at the respective session on Saturday)

A) Kampo International, Education and Public Outreach

Chairs: Kenji Watanabe, Heidrun Reißweber-Hewel, Shin Takayama, Sven Schröder

B) Pharmacobotany, Crude Drug Supply and Basic Research

Chairs: Michael Wink, Silke Cameron, Toshiaki Makino, Hans Rausch

Afternoon Coffee Break from 14:30-15:00

15:00-16:10 **Parallel Workshops (C, D)**

C) Clinical Experience and Research

Chairs: Keiko Ogawa, Yoshiharu Motoo, Gregory Plotnikoff, Tetsuhiro Yoshino

D) Historical Aspects: Learning from Tradition

Chairs: Denichiro Yamaoka, Gretchen de Soriano, Hiromichi Yasui, Bernd Kostner

16:10-17:10 **Meet the Experts:**

Kampo Prescriptions for Difficult Clinical Cases
(including practical tutorials with patients)

17:30-18:30 **General Meeting of ISJKM Members**

Town Hall of Hann. Münden:

19:00 *Dinner, Music and Dance*

Saturday, September 7, 2019

Welfenschloss

- 9:00-9:10** **Welcome Addresses**
Silke Cameron, Symposium-President, Hann. Münden and
Heidrun Reißenweber-Hewel, President of ISJKM, Munich
- 9:10-9:20** **Greeting Remarks**
Takashi Ito, President, The Japan Society for Oriental Medicine (JSOM)
Dominik Irnich, President, German Medical Association of Acupuncture (DÄGfA)

Session A: Kampo International, Education and Public Outreach

Chairs: Keiko Ogawa and Kenji Watanabe

- 9:20-9:30** **Kampo International: New Trends and Challenges**
Heidrun Reißenweber-Hewel, Clinic for Japanese Medicine, and Competence Centre
Complementary Medicine, Technical University, Munich, Germany
- 9:30-9:45** **Current status of East-Asian Medicine Education in the United States and
Japanese Kampo Medicine: a model for the future**
Nigel Dawes, Kampo Institute, New York and Eric Buckley, Christus St. Vincent
Hospital, Santa Fe, New Mexico, USA
- 9:45-10:00** **Establishment of a Global Network of Kampo Medicine**
Kenji Watanabe, Otsuka Kampo Clinic and Keio University Tokyo, Japan
- 10:00-10:15** **Integration of Kampo and Modern Medicine in General Practice in Europe**
Ulrich Eberhard and Sigrid Bormann, Clínica Médicos Para Tí, Madrid, Spain
- 10:15-10:30** **Summary of Workshop and Session Results**

Morning Coffee Break from 10:30 to 11:00

Session B: Pharmacobotany, Crude Drug Supply and Basic Research

Chairs: Michael Wink and Toshiaki Makino

- 11:00-11:15** **Effects of Standardized Extracts of Japanese Kampo-Medicine in Human and Murine
Pancreas Carcinoma Cell Lines**
Silke Cameron, University Medicine Göttingen, Germany
- 11:15-11:30** **18 β -glycyrrhetyl-3-O-sulfate is Suggested to be a Causative Agent of Licorice-induced
Pseudoaldosteronism**
Toshiaki Makino, Nagoya City University, Nagoya, Japan
- 11:30-11:45** **Kaki Calyx: Asian Specific Medication for Hiccups**
Kayoko Shimada-Takaura, The Museum of Osaka University, Osaka, Japan
- 11:45-12:00** **Summary of Workshop and Session Results**

Poster Session I: 12:00-12:50

Lunch Break from 12:50 to 14:00

Session C: Clinical Experience and Research

Chairs: Heidrun Reißweber-Hewel and Yoshiharu Motoo

- 14:00-14:15** **Use of *maoto* (Ephedra Decoction) to Alleviate Flu Symptoms**
Tetsuhiro Yoshino, Keio University, Tokyo, Japan
- 14:15-14:30** **Prophylactic Efficacy of *ninjin'yoeito* for Oxaliplatin-induced Cumulative Peripheral Neuropathy in Patients with Colorectal Cancer receiving Postoperative Adjuvant Chemotherapy: a randomized, phase 2 trial (HOPE-2)**
Yoshiharu Motoo, Kanazawa Medical University, Ishikawa, Japan
- 14:30-15:00** **Kampo *Hozai* and Phytotherapy for Cachexia: Where do we stand?**
Kenny Kuchta, University of Göttingen Medical School, Göttingen, Germany
- 15:00-15:15** **Prediction of Traditional Diagnostic Patterns, deficiency-excess and cold-heat Patterns, in Japanese Kampo Medicine: A multicentre prospective observational study**
Ayako Maeda-Minami, Keio University, Tokyo, Japan
- 15:15-15:30** **The Effect of *daisaikoto* for Shoulder Stiffness and related Changes in Stool Condition: A retrospective Study**
Minoru Ohsawa, Tohoku University Hospital, Sendai, Japan
- 15:30-15:45** **Summary of Workshop and Session Results**

Afternoon Coffee Break from 15:45 to 16:15

Poster Session II: 16:15-16:40

Session D: Historical Aspects: Learning from Tradition

Chairs: Gretchen De Soriano and Denichiro Yamaoka

- 16:40-16:55** **Analysis of the Development of Kampo Medicine in Japan from the Perspective of Medical History**
Hiromichi Yasui, Yasui Clinic, Yokkaichi, Japan
- 16:55-17:10** **The Historic Morino Herb Garden (Morino-Kyuyakuen): Sowing Seeds for the Future**
Kyoko Takahashi, Osaka University, Osaka, Japan
- 17:10-17:25** **A Graphic Narrative Approach in Exploring the Development of *fukushin* in Japanese Kampo Medicine**
Gretchen De Soriano, Kampo UK Association, London, United Kingdom
- 17:25-17:40** **Summary of Workshop and Session Results**

18:15 *Medieval Castle Tour with Dinner at the Knight's Hall and Music*

Poster Presentations:

Poster Session I: Saturday, Sept. 7: 12:00–12:50

- P1:** **A Neonatal huge Cervical Lymphatic Malformation Successfully Treated with *eppikajutsuto* and *ogikenchuto*: A Case Report**
Keiko Ogawa, Department of Japanese-Traditional (Kampo) Medicine, Kanazawa University Hospital, Kanazawa, Japan
- P2:** **Efficacy of Kampo Medicine for Pediatric Diseases Refractory to Western Medication: Survey of Japanese-Oriental (Kampo) Medicine at Chiba University Hospital**
Yuki Watanabe, Department of Japanese Oriental 'Kampo' Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan
- P3:** **Perspectives on the Use of *ninjin'yoeito* in Modern Medicine: a Review of Randomized Controlled Trials**
Shin Takayama, Department of Kampo Medicine, Tohoku University Hospital, Sendai, Japan
- P4:** **Investigation of Kampo Medicine Prescribed during Hospitalization in Tohoku University Hospital**
Ryo Sugimine, School of Medicine, Tohoku University, Sendai, Japan
- P5:** **Challenges of Intercultural Terminology: Brazilian Portuguese Denominations for Kampo Medicine Nomenclatures**
Kazusei Akiyama, Consultório Kazusei Akiyama, São Paulo, Brazil
- P6:** **A Case-Series of 10 Patients with Female Hormonal Imbalance (*Chi-no-michi* syndrome) successfully treated with *nyoshinsan***
Eiko Mori, Kitasato University, Oriental Medicine Research Center, Tokyo, Japan
- P7:** **Flipped Class using Kampo E-Learning System in Medical and Pharmaceutical Schools**
Aki Ito, Kanagawa Institute of Industrial Science and Technology, Kanagawa, Japan
- P8:** **Two Cases of Immune Thrombocytopenia Successfully Treated with Kampo Medicine**
Chiho Otani, Tamashima Clinic of Hematology and Kampo Medicine, Shizuoka, Japan
- P9:** **Clinical Reasoning in Kampo Medicine Applying the Dual-process Theory to Historical Kampo “*sho* scripts”**
Mitsuyuki Takamura, Kampo Medicine Outpatient Clinic, Mie University Hospital, Tsu, Japan

Poster Session II: Saturday, Sept. 7: 16:15–16:40

- P10:** **A Quick and Resource-saving Preparation Method for Decoction of Kampo formulae inspired by the Method of Boiling Powdered Crude Drugs in the Song Dynasty of China**
Tsukasa Fueki, Matsuya Pharmacy, Niigata, and Toho University, School of Medicine, Tokyo, Japan
- P11:** **Efficacy of Kampo Medicine for Pollen Allergy in Japan**
Izumi Kimoto, Hirose Clinic, Aichi, Japan
- P12:** **Significance of Kampo Medication Complying with the Clinical Demand: Results of a Questionnaire Survey among Japan Society for Oriental Medicine (JSOM) Member Doctors**
Yasuhito Kimura, Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan
- P13:** **Usage Trend of Kampo medicine at a Clinic in a Physician-shortage Area**
Natsumi Saito, Department of Education and Support for Regional Medicine, Department of Kampo Medicine, Tohoku University Hospital, Sendai, Japan
- P14:** **The Track and Record of Palpation Sites and Pressure by Kampo Experts using an Abdominal Palpation Monitoring System for Standardization of Abdominal Palpation in Kampo Medicine**
Shuji Yakubo, Department of Clinical Kampo Medicine, Meiji Pharmaceutical University, Tokyo, Japan
- P15:** **Integrated Treatment for Cancer using Kampo and Western Medicine**
Masayuki Shimizu, Surgery and Internal medicine Clinic of Sendai City, Wakabayashi, Sendai, Japan
- P16:** **Procurement of Active Principles and Therapeutics for Kampo Treatment in Europe**
Hans Rausch, Phytochem Referenzsubstanzen, Neu-Ulm, Germany



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Kampo International: New Trends and Challenges

Heidrun Reißweber-Hewel

Private Clinic for Japanese Medicine, Gräfelfing/Munich, and Competence Centre for Complementary Medicine and Naturopathy, Technical University of Munich, Germany

Our 5th international ISJKM Kampo Symposium today is also marking the 10th Anniversary of our society ISJKM. In 2009 in Tokyo, on the occasion of the 60th Anniversary of the Japan Society for Oriental Medicine (JSOM), a small group of Western and Japanese Kampo specialists, all trained in Japan, founded our society with the aim to make the traditional herbal medicine of Japan better known to the outside world. We had a workshop 2010 in Tromsø, Norway, our first symposium in 2011 was in Munich, the second in 2013 in London, the third 2015 in Vienna, the fourth 2017 in Berlin, and the fifth now in Hann. Münden. So, it is time to pause for a minute and to look back on what we have achieved during the past 10 years and where we are!

Japanese Kampo Medicine outside of Japan becomes increasingly popular. While in the first years of ISJKM activity, only in Europe education programs of Kampo Medicine had been carried out, we see now new activities in different parts of the world, such as USA or Brazil. In Germany, we are teaching Kampo medicine systematically to German physicians in regular courses since 2011 organized by the German Medical Association of Acupuncture (DÄGfA). Meanwhile, our trained colleagues form a network of Kampo doctors throughout Germany.

What is the special advantage of the Japanese Kampo approach and why should it be attractive for modern practitioners to learn Kampo medicine? While modern medicine has developed efficacious and expensive treatment options for many diseases, it often provides not enough tools to meet the individual subjective complaints and to consider the constitution of the patients adequately. Here the personalized treatment concept of Kampo can fill this gap. The Kampo-specific abdominal palpation (*fukushin*) as a pragmatic, easy to learn hands-on method provides additional information about the underlying problem and the constitution of the patient.

At the same time, Kampo is well integrated into the modern medical system and a modern diagnosis is the starting point for a Kampo therapy, this integrative approach makes it easy to start with. The focus of the therapy lies on the traditional prescription as a fixed combination, not on newly combined herbs, and the number of herbs and prescriptions has been pragmatically selected and reduced. After a one year training our doctors are fit to integrate Kampo into their daily practice.

One of the main challenges of Kampo International is still the supply of original high quality Kampo medicines. Despite logistic challenges, our main source of drug supply is the import of Kampo crude drugs from Japan. These can be administered to the patients as prescribed mixtures for decoctions or individually manufactured preparations in the pharmacy such as tinctures.

In Japan, the main sources of supply are finished high quality extract products. It is an important step that the first Japanese Kampo product in the EU has been launched on the German market. Yamato®Gast is a licenced pharmacy-only herbal drug containing the formula *rikkunshito* and is registered for the indication of mild gastrointestinal complaints such as loss of appetite, discomfort, epigastric fullness and bloating. The proof of tradition as required by EU and national requirements is based on the long traditional use in Japan and the meanwhile accumulated tradition in Europe.

In order to further promote the understanding of Kampo worldwide, all efforts should be pooled to extend education and training of physicians, to improve medicine supply, and to strengthen the international scientific collaboration.

Short CV

Heidrun **Reißweber-Hewel**, MD, PhD in Medicine; M.A. in Japanese Studies; board specialist of Internal medicine and Gastroenterology. 1994-1997 JSPS-Humboldt Fellow at the Oriental Medicine Research Center, Kitasato University, Tokyo. 1997-2010 Head of the Research Unit for Japanese Phytotherapy (Kampo) at LMU University of Munich, since 2011 Private clinic for Japanese Medicine at Gräfelfing/Munich and Associate Lecturer at the Competence Centre for Complementary Medicine and Naturopathy (CoCoNat), Technical University of Munich. Teaching of Kampo courses at the German Medical Doctors` Association for Acupuncture (DÄGfA). Since 2011 President of the International Society for Japanese Kampo Medicine (ISJKM).

Current status of East-Asian Medicine Education in the United States and Japanese Kampo Medicine: a model for the future

Nigel Dawes¹, Eric Raymond Buckley²

¹Private practice, The Kampo Institute, New York, New York; ²Integrative Medicine and Palliative Care Departments, Christus St. Vincent Hospital, Santa Fe, New Mexico, USA

Traditional Chinese Medicine has been a licensed practice in the United States since 1976. 47 States have practice acts defining and regulating acupuncture. Most of these also require exam-based Board Certification in acupuncture from the National Commission for the Certification of Acupuncture and Oriental medicine (NCCAOM). The NCCAOM also offers a separate exam-based Diplomate in Chinese Herbal Medicine, however this is not required by many states for inclusion in their licensed scope of practice. Most states in the US today do not have practice acts regulating Herbal Medicine. Whilst the practice of acupuncture is highly regulated in the US today, Herbal Medicine is mostly unregulated. This affords some flexibility in the future development of educational models in Herbal Medicine.

Meanwhile, TCM Herbal practice defines the landscape of education in the US through schools that mandate a specific curriculum in herbalism, set by the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM). This curriculum is dominated by TCM theory and taught using the TCM classification and application of herbs and formulas. School alumni surveys however, indicate that a surprisingly low percentage of graduates actually go on to practice herbs, which often end up becoming a mere adjunct to acupuncture practice. It would seem the moment is right to consider a different educational model for the delivery of Herbal training in the US.

The methodology of Kampo Medicine, with its emphasis on the Shang Han Lun, abdominal diagnosis and its more recent history of being prescribed primarily by physicians in Japan, offers a great opportunity and potential to expand in the USA. This methodology, when taught systematically along with abdominal diagnosis and the clinical pattern (*sho*) of each formula, provides a concrete, hands-on approach to teaching herbal medicine that is suited to the western mindset. Additionally, Kampo has an excellent safety track record and extensive research publications on its application in clinic.

Knowledge of Kampo in the western hemisphere is very limited. Conscious of this, a few dedicated practitioners joined together to form the North American Kampo Consortium whose purpose is to further educational and practice initiatives in the field of Kampo. Presently, Nigel Dawes and his New York-based Kampo Institute, is one of the only teachers on the circuit providing in-depth Kampo education. Together with Kenji Watanabe, MD, from Keio Univ. Tokyo, the High Desert Hari Society in Santa Fe, NM, and SunTen Laboratories in Irvine, CA, have formed this educational coalition whose mission is to promote educational, research and practice exchanges between the varied Kampo communities from around the world. As part of this initiative, the Consortium is planning the first North American Kampo Symposium in the USA in May 2020.

Short CV:

Nigel **Dawes**, L.Ac. M.A., French and Spanish Literature, Graduate training in Acupuncture, Shiatsu and Kampo 1982-87, Tokyo. Post-Graduate Kampo Internship 1988-90, London. Founder/Director London College of Shiatsu 1987-93, London. Dean, Graduate School of Oriental Medicine 1994-2001 (NY). Founder/Director NY Kampo Institute 2000-present, NY, Private practice 1987-present, UK, USA International lecturer in Kampo specializing in Fukushima (Abdominal Diagnosis). Author of two books on Shiatsu; co-translator of Dr. Otsuka's 1956 text: Kampo Igaku.

Eric Raymond **Buckley**, DOM, Founder of the Integrative Medicine Department for Christus St. Vincent Hospital, Santa Fe, New Mexico. Studied at National Hospital of Traditional Medicine, Ha Noi, Viet Nam 2007, Kyung Hee University, Seoul, South Korea 2013, and Keio University's Center for Kampo Medicine, Tokyo, Japan 2016. Board member of their High Desert Hari Society (HDHS) and Chair of their Kampo Medicine Committee, Founding board member of the American Society of Acupuncturists (ASA), Chair of the U.S. delegation of the International Standards Organization's Technical Committee 249: Traditional Chinese Medicine (ISO/TC249).

Establishment of a Global Network of Kampo Medicine

Kenji Watanabe

Otsuka Kampo Clinic, Tokyo; Keio University School of Medicine, Tokyo, Japan

In the last couple of decades, Kampo medicine has been more and more visible to the world. This was driven by featuring complementary and alternative medicine since the 1990ies, which is now widely recognized as “integrative medicine and health“. This movement will be even more promoted by the traditional medicine chapter of the International Classification of Diseases, Version 11 (ICD-11). In a long history of ICDs since 1900, this is the first time that traditional medicine is included.

In daily practice, foreign patients increasingly come to visit me at Otsuka Kampo Clinic. Usually they are residents in Japan or acquaintances of them in Asian countries such as Korea. However, in these days, patients who live outside of Japan come to contact me directly and visit Otsuka Kampo Clinic. Here I introduce several cases as examples:

The first case was a male Indonesian with chronic sinusitis. Although he was treated with antibiotics, sinusitis recurred four times a year. He contacted me by email and visited Otsuka Kampo Clinic. I prescribed *shosaikoto* with *kikyo* (Platycodi rad.) and *sekko* (Gypsum) for two months. Then he emailed me that his sinusitis was gone and his doctor in Malaysia had guaranteed that it was completely cured. He asked me to see his son in near future.

The second case is a female from the US. She suffered from breast cancer and was operated following a pre-operational chemotherapy, followed by radiotherapy. She found my email address and visited Otsuka Kampo clinic. I prescribed *hochuekkito* for her and could help her.

The third patient was a female from Canada with parotid gland carcinoma. She visited Otsuka Kampo Clinic for the purpose of prevention of recurrence or metastasis after operation. I prescribed her *hochuekkito* and *keishibukuryogan*. Then her mother joined her at the next visit. She had suffered from rheumatoid arthritis in the last 8 years. Her hand and feet joints were swollen and very painful, here I prescribed *hochuekkito* and *bushito*.

These examples show that the demand for Kampo therapy from foreign patients is increasing and patients seek for Kampo clinics by all means through internet search e.g. at Kampo UK or ISJKM websites. Sometimes they are inspired by articles on the web or video messages.

In some cases, it is very tough for a patient to come to Japan and I try to refer these patients to a Kampo colleague in the international network. We should establish a robust network of Kampo practitioners to meet the global demand for Kampo therapy. In that sense, the role of ISJKM is very important to provide this global network.

Short CV:

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Integration of Kampo and Modern Medicine in General Practice in Europe

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The increasing demand for the so called 'Alternative Medicine' is a real challenge for all medical therapists and we consider the growing interest for complementary methods in the past decades especially in our industrialized countries. The gap between 'modern' and 'traditional' medical systems becomes more and more narrow as complementary therapies find one's way into modern medical practice.

Japanese Traditional Kampo Phytotherapy can be considered as a complementary medicine and is widely recognized in Japan as an important part of 'integrative medicine'. In this regard, knowledge, teaching, research and practice are traditional and 'available' for Japanese doctors all over the country.

However, in European countries the situation and conditions to practice Kampo are fundamentally different. The purpose of our presentation is to demonstrate our way of integration of Japanese Traditional Medicine – and particularly Kampo – into our daily practice in our clinic located in the center of Madrid.

Short CV:

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Effects of Standardized Extracts of Japanese Kampo Medicine in Human and Murine Pancreas Carcinoma Cell Lines

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Introduction: The poor prognosis of pancreatic cancer demands a better understanding of molecular networks and the establishment of new therapeutic approaches. Next to genetic and epigenetic mechanisms at cellular level, tumor development and growth is promoted by chronic inflammation, redox-mechanisms, impairment of microcirculation and nutrition as well as disruption of wound healing. These are mechanisms in which herbal prescriptions have been used traditionally. Japanese Kampo Medicine can thus be a supplementary treatment option.

Methods: The aim of our studies was first to examine the epigenetic effects of Japanese Kampo medicine on growth regulation of human and murine pancreatic cancer cells. PANC1-Zellen, NKCII und KPCbl6 were cultivated in DMEM (+10% FCS, +1% NEAA) until confluence and then treated with different standardized single herb and combined Kampo extracts. Methanolic, ethanolic (25%) and traditional hot watery extracts were used. Cell survival was tested by MTT-Assay at different time points (24h, 48h, 72h und 96h) and concentrations. For analysis of protein-expression (Western-Blot) of proliferation markers (CDK6, Cyclin D1, CyclinD3), and tumor suppressor genes (p15, p21, p27) whole cell lysates were used (24h und 48h). Changes in gene expression were further verified on transcript level (qPCR). FACS analysis was used for cell cycle studies in *Glycyrrhizae uralensis* radix and *Scutellaria baicalensis* radix treated cells.

Results: Especially the methanolic extract of *Scutellaria baicalensis* radix inhibited tumor cell growth *in vitro*. This effect was concentration dependend in PANC1, NKCII and KPCbl6-cells. The various cyclins and cell-cycle inhibitors were regulated accordingly. A G1-arrest could be shown in FACS analysis.

Conclusion: Kampo extracts have an epigenetic, antiproliferative effect on cellular level, *in vitro*. In ongoing studies, the molecular effects on growth inhibition shall be verified and complemented with microenvironment studies in an orthotopic transplantation mouse model of pancreatic cancer.

Short CV:

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18 β -glycyrrhetyl-3-O-sulfate may be a Causative Agent of Licorice-induced Pseudoaldosteronism

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Pseudoaldosteronism is one of the most frequent adverse effects of Kampo medicines, and it is necessary to be recognized earlier and to prevent its aggravation in Kampo medication. Its pathogenesis has large individual differences, and its onset has been unpredictable. It has been considered as its pathogenesis that some metabolites of glycyrrhizic acid (GL), one of the main components of Glycyrrhiza root (licorice) that is the most frequent constituent in Kampo medicines, inhibit 11 β -hydroxysteroid dehydrogenase type II (11 β -HSD2) in tubular cells. Since GL is absorbed as a metabolite glycyrrhetic acid (GA) by intestinal bacteria, GA had been considered as a causative compound of pseudoaldosteronism.

In our previous studies, we found that another metabolite, 3-monoglucuronyl-glycyrrhetic acid (3MGA) might be a causative agent for pseudoaldosteronism, since 3MGA appeared in the circulation when the function of multidrug resistance protein 2 (Mrp2) is decreased, and excreted into urine *via* organic anion transporters (OATs) expressed at the basolateral side of tubular epithelial cells, where 11 β -HSD2 is located. Circulating GA cannot be excreted into the urine since GA highly binds to serum albumin not to pass through glomerular filtration and is not the substrate of transporters expressed on tubular epithelial cells.

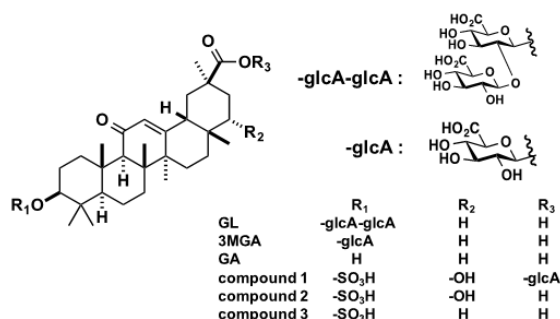
Recently, we found 22 α -hydroxy-18 β -glycyrrhetyl-3-O-sulfate-30-glucuronide (**1**), one of the metabolites of glycyrrhizin (GL) in the urine of Eisai hyperbilirubinuria rats (EHBRs) treated with GA, and suggested that it is also a possible causative agent of pseudoaldosteronism. The discovery of **1** also suggested that there might be other metabolites of GA as causal candidates.

Then, we found 22 α -hydroxy-18 β -glycyrrhetyl-3-O-sulfate (**2**) and 18 β -glycyrrhetyl-3-O-sulfate (**3**) in the urine of EHBR treated with GA. Compound **2** and **3** more strongly inhibited rat 11 β -HSD2 than **1** did *in vitro*. When EHBRs were orally treated with GA, GA and **1–3** in plasma and **1–3** in urine were detected; the levels of 3MGA were quite low. **1–3** were shown to be the substrates of OAT1 and OAT3. In the plasma of a patient suffering from pseudoaldosteronism with rhabdomyolysis due to licorice, we found 8.6 μ M of **3**, 1.3 μ M of GA, and 87 nM of **2**, but **1**, GL, and 3MGA were not detected. These findings suggest that 18 β -glycyrrhetyl-3-O-sulfate (**3**) is an alternative causative agent of pseudoaldosteronism, rather than 3MGA, GA, **1**, and **2**.

Ref. (1) *Biol. Pharm. Bull.* **37**, 898–902, 2014.

(2) *Sci. Rep.* **8**: 15568, 2018.

(3) *Sci. Rep.* **9**: 1587, 2019



Short CV:

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Kaki Calyx: Asian Specific Medication for Hiccups

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The crude drug Kaki Calyx is mainly used for the treatment of hiccups in Japanese Kampo medicine, while neither active constituent nor action mechanism is known. It is listed in “The Japanese Standards for Non-Pharmacopoeial Crude Drugs” as the persistent calyx of the mature fruit of *Diospyros kaki* Thunberg, but there is no prescription of characteristic constituents for quality control. All Kaki Calyx used in Japan is imported from China, therefore we aim to achieve a stable supply of this crude drug through the sixth industrialization of the domestic Kaki Calyx production utilizing the locally cultivated persimmon.

We investigated historical literature and recent scientific reports about Kaki Calyx and confirmed that more than 90% of clinical trial reports were about hiccups and 80% of them showed its efficacy on hiccups. This suggests that Kaki Calyx has been used as an important medication of hiccups in Asia. By comprehensive investigation of clinical reports about hiccups, we found that about 90% of them were referring about persistent and intractable hiccups, but there is no standard treatment throughout the world. We prepared 3 Kaki Calyx samples from current markets and 7 historical samples inherited in Osaka University for morphological comparison.

Kaki Calyx is described to consist of calyx disk, abscission zone and calyx lobe (sepal) in Japanese and Chinese formulary, but we found that calyx lobe is lacking in current market products imported from China. In order to investigate the validity of domestically produced Kaki Calyx and necessity of calyx lobe as the medicinal part, we prepared samples including calyx lobe from persimmon cultivated in Nara or Wakayama prefecture for 4 years in a row.

We evaluated the inorganic and organic components by ICP-MS and LC-MS/MS, respectively among those domestic samples and 4 market samples produced in China. The results of ICP-MS analysis showed the safety of all collected samples. In addition, we compared the elemental profiles by principal component analysis (PCA) and found that the profiles were comparable between Chinese and domestic samples. We also constructed the multi-component analysis method mainly targeting catechins and found that the component patterns of Chinese and calyx disk of domestic samples were similar, but there are differences between calyx disk and lobe of domestic samples. We propose isoquercitrin as marker constituent which is detected stably and is contained characteristically in calyx lobe. We are now planning to evaluate the clinical efficacy to enhance the brand awareness of domestically produced Kaki Calyx.

Short CV

Kayoko **Shimada-Takaura**, PhD; Pharmacist. 2011-2013 Research Fellowships of the Japan Society for the Promotion of Science for Young Scientists (DC2). 2013-2014 Visiting Scholar at Department of Pharmacology, School of Medicine, University of South Alabama, USA (supported by Postdoctoral Fellowship, the Uehara Memorial Foundation). Since 2014, Assistant Professor of the Museum of Osaka University and Graduate School of Pharmaceutical Sciences, Osaka University, Japan.

Use of *maoto* (Ephedra Decoction) to Alleviate Flu Symptoms

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Background: Upper respiratory infections (URIs) are common in all ages and are frequently caused by viruses. Influenza is a common viral URI. Several basic and clinical studies have reported the effect of *maoto* (ephedra decoction), which is an ancient multicomponent herbal formulation, on influenza. It is extracted from 4 crude drugs: ephedra herb, apricot kernel, cinnamon bark, and glycyrrhiza root. *Maoto* is a more cost-effective option compared with neuraminidase inhibitors (NAIs) and other medications. To date, *maoto*-resistant influenza viruses have not been reported, which could be because *maoto* has multiple ingredients and also modulates the host immune reactions.

Objective: We performed a single-center retrospective chart review focusing on how we were using *maoto*, and a systematic review and meta-analysis to evaluate the efficacy and safety of *maoto* in alleviating flu symptoms.

Methods: First, a retrospective chart review between December 2013 and May 2015 was performed. We included febrile ($\geq 38^{\circ}\text{C}$) patients with upper respiratory symptoms within 48 h from the onset of fever. Patient profile and symptoms were investigated at the first consultation and clusters were constructed based on symptoms. Second, we searched MEDLINE, CENTRAL, EMBASE, and local databases from Japan, China, or Korea for studies published in or before October 2017. Clinical studies that compared the use of *maoto* combined with NAIs to NAIs alone and that of *maoto* alone to NAIs alone were included in the present analysis. The primary outcome measure (efficacy) was the duration from the initiation of medication therapy to the resolution of influenza symptoms (fever, headache, malaise, myalgia, and chills) and virus isolation.

Results: The chart review included 135 patients. They were divided into three clusters: chills without sweating (60.0%); chills with sweating (23.0%); and without chills (17.0%). *Maoto* was a frequently prescribed formula throughout the three clusters. In the systematic review, we identified 12 relevant studies, including 2 randomised controlled trials (RCTs, N = 60) and 10 non-randomised studies (NRSs, N = 1110). We found that treatment of URIs using *maoto* combined with NAIs was superior compared to NAIs alone in terms of the duration of fever in 1 RCT ($P < 0.05$; median difference = 6 h) and 4 NRSs ($P = 0.003$; weighted mean difference = 5.3 h). The duration of symptoms and virus isolation did not differ between the use of *maoto* and NAIs in 1 RCT and 8 NRSs. No severe side effects or adverse reactions were reported with *maoto* or NAIs.

Conclusions: Our findings suggest that *maoto* may lower the duration of fever when used alone or in combination with NAIs and may be a well-tolerated treatment for URIs regardless a traditional concept, *sho*. More RCTs are needed to determine the efficacy and safety of *maoto*.

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Short CV:

Tetsuhiro **Yoshino**, MD, PhD; 2008 MD, School of Medicine, Keio University; 2010 Senior Resident at Center for Kampo Medicine, School of Medicine, Keio University; 2014 Instructor at Center for Kampo Medicine, School of Medicine, Keio University; 2016 PhD, School of Medicine, Keio University; 2017 Visiting scholar at Linus Pauling Institute, Oregon State University; 2018 Project assistant professor at Center for Kampo Medicine, School of Medicine, Keio University, Tokyo, Japan

Prophylactic Efficacy of *ninjin'yoeito* for Oxaliplatin-induced Cumulative Peripheral Neuropathy in Patients with Colorectal Cancer receiving Postoperative Adjuvant Chemotherapy: a randomized, phase 2 trial (HOPE-2)

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Purpose: Peripheral neuropathy is an intractable side effect of oxaliplatin. There is no effective drug so far. *Ninjin'yoeito* (NYT, see <http://mpdb.nibiohn.go.jp/stork/>) has protective actions on oxaliplatin-induced neuronal cell injury *in vitro*, and ameliorates oxaliplatin-induced peripheral neuropathy *in vivo*. We aimed to clarify the clinical efficacy of NYT on oxaliplatin-induced cumulative peripheral neuropathy in a randomized controlled trial (RCT) at a postoperative adjuvant setting.

Methods: Fifty-two patients with colorectal cancers of pathological stage 3 received postoperative adjuvant chemotherapy with CapeOX regimen: capecitabine (2,400 mg/m²) plus oxaliplatin (130 mg/m²) of three-week interval with eight cycles. The patients were randomly assigned to an NYT administration group and a non-administration group before chemotherapy. NYT (Tsumura & Co., Tokyo) of 9.0 g/day were administered from day 1 of cycle 1 in the NYT group. Primary endpoint was the grade of cumulative peripheral neuropathy at the end of 8 cycles. Secondary endpoints included relative dose intensity (RDI) of oxaliplatin and recurrence-free survival (RFS).

Results: Forty patients (20 in both groups) completed 8 cycles of chemotherapy. Twelve cases (6 in both groups) discontinued chemotherapy due to adverse reactions (NYT 4, control 4), recurrence (NYT 1, control 1), patients' decline (NYT 1, control 0), or cerebrovascular accident (NYT 0, control 1). The incidence of grade 2 or greater cumulative peripheral neuropathy at the 8th cycle of chemotherapy was significantly lower in the NYT group (2/20, 10.0%) than the control group (10/20, 50.0%, $P=0.0310$). RDI of the NYT group was significantly higher than that of the control group (83.3 ± 3.3 vs. 72.3 ± 3.3 mg/m²/week, $P<0.001$). RFS of the NYT group tended to be longer than that of the control group ($P=0.370$).

Conclusions: This is the first report on the prophylactic efficacy of NYT against oxaliplatin-induced cumulative peripheral neuropathy. These results indicate that the addition of NYT prevents the occurrence of oxaliplatin-induced cumulative peripheral neuropathy even though the dose of oxaliplatin is higher. Treatment with an adequate dosage of oxaliplatin will afford a survival benefit.

Short CV:

Yoshiharu **Motoo**, MD, PhD, FACP, Professor, graduated from Tokyo Medical and Dental University Faculty of Medicine in 1980. Research Fellow at the Wadley Institutes of Molecular Medicine in Dallas, Texas, USA from 1984 to 1986. He joined Cancer Research Institute of Kanazawa University in 1988. Assistant Professor in 1992, Associated Professor in 2003 at the Department of Medical Oncology of the above institute. Fellow of the American College of Physicians (FACP) in 2000. Visiting scientist at INSERM U.624 in Marseille, France, supported by Japanese Government in 2002. Since 2005 Professor of Medical Oncology, Kanazawa Medical University. Board-certified expert of Internal Medicine, Medical Oncology, Gastroenterology and Hepatology, and Kampo Medicine.

Kampo *Hozai* and Phytotherapy for Cachexia: Where do we stand?

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In contrast to Western medicine, which currently offers no approved pharmacotherapy options for cachexia, in Japan multi-component extracts of medicinal plants are used with coverage by the national health insurance. Kampo medicine is an example of the modern concept of multi-component/multi-target therapy. Especially for the preparations *hochuekkito* (補中益気湯), *juzentaihoto* (十全大補湯), and *rikkunshito* (六君子湯) a multitude of clinical research data has been published in Japan and Korea. These traditional prescriptions are often grouped together under the term "*hoza*" (補劑) that can be roughly translated as "support medicine".

In clinical studies, *hochuekkito* showed efficacy in involuntary weight loss and fatigue in 63% of 162 genitourinary cancer patients (Kuroda M 1985). For cancer-related fatigue, a significant improvement was seen within 2 weeks (Jeong JS 2010). In patients with chronic fatigue syndrome, *hochuekkito* showed an overall improvement with 8-12 weeks of therapy (Kuratsune H 1997). In a randomized placebo-controlled trial on 13 geriatric patients in a 16 weeks treatment protocol, *hochuekkito* showed a significant improvement of general health, physical functioning and the Profile of Mood States (POMS) (Satoh N 2005). In 71 geriatric COPD patients in a placebo-controlled randomized study, Tatsumi K et al. (2009) found a significant body weight increase and a CRP, TNF- α , IL-6 decrease over 6 months of therapy.

For *juzentaihoto* in 48 hepatocellular carcinoma patients, Tsuchiya M et al. (2008) documented a significantly longer recurrence-free survival (49 vs. 24 months) as compared to the control group ($p=0.023$). For the much simpler *rikkunshito* prescription, a retrospective study (Fujitsuka N 2011) on 39 Stage III/IV pancreatic cancer patients treated with Gemcitabine ($n=33$) or Gemcitabine / *rikkunshito* ($n=6$) showed a significantly prolonged median survival with 224 vs. 378.5 days ($p<0.05$). In an open-label clinical study (Utumi Y 2011) on geriatric cachexia in 6 dementia patients, treatment with *rikkunshito* for 4 weeks resulted in a significant body weight increase. In all the above studies, the standardised dosage of 3x2.5 g/d for most Japanese health insurance-covered Kampo extract-preparations was applied.

As there is currently no accepted pharmacotherapy option for cachexia available in the West, a transfer of these Japanese gold standard preparations into the European market would be desirable. As for a Japanese product containing *rikkunshito*, a registration for gastrointestinal complaints was now achieved in Germany. The only comparable medicines are the so called "Adaptogens", which were developed in the former Soviet Union in order to increase the resistance of organisms to biological stress (Panossian A 2017). Several of these raw drugs are also found in the abovementioned Kampo *hoza*. In any case, more research in this field is urgently needed in order to provide new, effective treatments for cachexia patients.

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Short CV:

Kenny **Kuchta**, Prof.h.c. Dr. rer.nat. FLS; 2012 - 2014 Member of the faculty at Sanyo Gakuen University, Okayama, Japan; 2014 - 2015 Member of the faculty at Sanyo Gakuen University-College, Department of Food & Nutrition, as chair of Natural Products Chemistry Research. 2015 - 2017 Visiting Prof. at the National Institute of Health Science (NIHS), Division of Pharmacognosy, Phytochemistry, and Narcotics, grant by the Japan Society for the Promotion of Science (JSPS). Since 2015 Prof.h.c. of the Zhejiang Institute of TCM and Natural Medicine, Hangzhou, China; supervisor of doctoral thesis projects on pharmaceutical biology. Since 2017 affiliation to research projects at the Clinic for Gastroenterology and Gastrointestinal Oncology, University Medical Center Göttingen, Germany

Prediction of Traditional Clinical Diagnostic Patterns, deficiency-excess and cold-heat patterns, in Japanese Kampo Medicine: A multicentre prospective observational study

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Background: We are presently using an e-questionnaire system on a tablet computer for recording patients' subjective symptoms and trying to make a prediction model of the traditional clinical Kampo diagnostic patterns using the random forest model. We have already successfully predicted the deficiency-excess patterns with around 90% accuracy using our patients at Keio University. Here we compare the prediction models obtained from different Kampo clinics in Japan.

Objectives: The purpose of this study was to compare and extract important patient questionnaire items by creating random forest models for predicting deficiency-excess pattern and cold-heat pattern diagnosis in four Kampo clinics.

Methods: This was a multicentre prospective observational study. The number of participants (n) who visited the four Kampo clinics in Japan from 2012 to 2015 were as follows: Chiba University (n=412), Iizuka Hospital (n=570), Keio University (n=429), and University of Toyama (n=367). The main outcome measures were deficiency-excess and cold-heat pattern diagnoses made by board-certified Kampo experts. We used 153 items as independent variables, including age, sex, body mass index, systolic and diastolic blood pressures, and 148 subjective symptoms, which we recorded through the questionnaire. We extracted the 30 most important items from each clinic's random forest model and selected items that were common among the clinics.

Results: For the deficiency-excess pattern, the body mass index was the most important item in all the four random forest models, and 14 other items were common among the top 30 items. For the cold-heat pattern, 15 items were common among the top 30 items in the random forest models. Body mass index and subjective cold or heat sensations were the common important items in the four clinics. Furthermore, we found BMI and systolic blood pressure were commonly important items between the random forest models for deficiency-excess pattern and cold-heat pattern.

Conclusions: We identified the common important items for diagnosis in the deficiency-excess pattern and cold-heat pattern among the four Japanese Kampo clinics. The results suggested that physicians of the participating clinics were diagnosing deficiency-excess and cold-heat patterns in a similar manner.

Short CV:

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The Effect of *daisaikoto* for Shoulder Stiffness and related Changes in Stool Condition: A retrospective Study

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Background and Aim: *Daisaikoto* has been used for the treatment of shoulder stiffness and abdominal distention with constipation, which makes stool changes, especially diarrhea, associated with the prescription a concern. The aim of this retrospective observational study was to investigate the effect of *daisaikoto* on shoulder stiffness and the relation between its effects on stiffness relief and stool condition.

Methods: We reviewed the medical records of middle-aged women in menopause treated with *daisaikoto* for shoulder stiffness from December 2014 through November 2015 at Red Cross Maebashi Hospital. Two or four weeks after the prescription of *daisaikoto*, symptoms were evaluated and categorized as improved, no change, or worse. Stool conditions were also evaluated and categorized as constipation, normal, or diarrhea. The changes in symptoms before and after treatment were analyzed using the Wilcoxon signed-rank test. The relationship between symptom changes and stool condition was analyzed using Spearman's rank correlation coefficient.

Results: There were 24 patients who received *daisaikoto* treatment, and shoulder stiffness was relieved in 79% ($p < 0.05$). Diarrhea was reported in 8% of patients, all of whom were classified in the "non-improvement" group, which included depressed patients. Improvement of shoulder stiffness and stool condition showed a correlation coefficient of 0.542. *Daisaikoto* did not worsen stool condition in case it is effective.

Conclusion: *Daisaikoto* effectively relieves shoulder stiffness in middle-aged women and did not worsen stool condition when shoulder stiffness improves. *Daisaikoto* without Rhubarb or other formulas may be chosen for the treatment of diarrhea in patients with shoulder stiffness.

Short CV:

Minoru **Ohsawa** M.D., PhD. graduated from Niigata University School of Medicine in 1994 and from Gunma University Graduate School of Medicine in 2000. He is an assistant professor at the Tohoku University Hospital. Fellow of the Japan Society of Obstetrics and Gynecology, the Japan Society for Menopause and Women's Health and the Japan Society for Oriental Medicine.

Analysis of the Development of Kampo Medicine in Japan from the Perspective of Medical History

Hiromichi Yasui

Yasui Clinic, Yokkaichi, Mie, Japan

Kampo medicine in Japan was originally adopted from China since the 5th century and developed by directly absorbing the concepts of Chinese medicine. The academic level in Japan gradually increased, and by the 16th century, it was possible to widely understand and operate the medicine of concurrent Chinese Ming dynasty (1368-1644).

At that time, Chinese medicine was influenced by the thought of neo-Confucianism which had been developed since the Song dynasty (960-1279). It focused on a harmonization of all aspects of medical doctrines into one corresponding system, bringing together herbal medicine and acupuncture. In Japan, Manase Dōsan (1507-1594) was the leading medical figure at that time. He almost adopted the Chinese concepts as they were and brought them to the clinical scene. Manase's medicine then spread throughout Japan and became the leading medicine of the Tokugawa shogunate during the Edo Period.

However, already in the late 17th century a countermovement emerged. New comments on ancient classical textbooks like the *Shang han lun* were introduced to Japan, and Japanese scholars were attracted by them. They understood the merits and practical value of the old therapeutic books and started to turn against the now state doctrine of neo-Confucianism which was propagated by the ruling Tokugawa Shogunate. The ancient classical textbooks were at the same time seen as representing the original ancient Confucianism.

The person who created the main source of this reaction was the scholar Ogyū Sorai (1666-1728). He focused on the words and phrases used in the ancient texts for more reliable knowledge and studied on how they were used in the original literature. He gave a new meaning to every word and sentence from this viewpoint.

The method of Ogyū Sorai had great influence on the physicians of his time. One of them, Yoshimasu Tōdō (1702-1773), applied Sorai's methodology to medicine, denying all diagnostic and therapeutic methods used so far as speculative and proposed instead a new therapeutic system. He developed a pragmatic treatment system that offered unique interpretations of the texts, words, and prescriptions of *Shokanron* (*Shang han lun*) and *Kinkyōryaku* (*Jin gui yao lue*) and directly adjusted prescriptions to the symptoms of the patient. This is called *hōshō sōtai* (correspondence of symptom pattern and formula). In addition, the examination of the abdomen became the most important diagnostic tool within his system.

The methodology of *hōshō sōtai* and the examination of the abdomen became the core elements of Japanese Kampo medicine. The current form of Kampo medicine is based on this unique story. Although furtheron additional elements were introduced, the principle of *hōshō sōtai* has not changed. Despite the same ancient Chinese medicine as the ancestor, the current form of Kampo medicine is different from TCM in China and Korean medicine in Korea. It can be said that one of the main reasons is that the eighteenth-century Japanese physicians finally did not accept neo-confucianistic doctrines.

Short CV:

Hiromichi **Yasui** MD. Board-certified expert of Kampo Medicine of Japanese Society for Oriental Medicine (JSOM). 1979-1981, Research fellow at Marburg and Goettingen Universities, Germany. Since 1986 Director of Yasui Clinic in Yokkaichi-city.

The Historic Morino Herb Garden (Morino-Kyuyakuen): Sowing Seeds for the Future

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The Morino-Kyuyakuen (Morino Herb Garden) is Japan's oldest private herb garden and was founded in 1729 by the Morino family's first-generation Tosuke, Michisada Saikaku (1690-1767). Eighth Tokugawa shogun Yoshimune's strategy to realize domestic production of medicinal plants during the Kyoho era (1716-1736) is considered a successful example of industrial policy, as it led to the cultivation of native medicinal plants intended to substitute imported varieties, as well as to the development of quality crude drugs. Saikaku served as a guide for Saheiji Uemura, an official in charge of herb-gathering projects. To reward his efforts, Saikaku received herbal seedlings of precious foreign medicinal plants. He was devoted to cultivating wild herbs and growing medicinal plants in his own garden, known today as the Morino-Kyuyakuen. Between 1729 and 1740, the Shogunate gifted Saikaku a total of more than thirty medicinal plants of introduced species. Through his association with specialists in natural history and *honzogaku* - the traditional study of medicinal plants - Saikaku became skilled at identifying medicinal materials and developed improved methods of cultivation. In his later years, Saikaku completed the ten-volume *Matsuyama-honzo* ("Matsuyama herbal"), an illustrated reference book of medicinal flora and fauna.

The *bofu* entrusted to Saikaku in 1735 was *Saposhnikovia divaricata* Schischkin (*Umbelliferae*) indigenous to northeast China and Mongolia. Called *Tosuke bofu* in Japan, in reference to Saikaku's given name, its roots and rhizomes are efficacious in lowering fever and reducing pain and muscle spasms. The seeds of the *bofu* cultivated in Japan today originated from those first introduced here from China during the Kyoho era and have been replanted continuously in the Morino-Kyuyakuen ever since.

Toki is another traditional medicine from China. The original species of this plant differs between China and Japan: *Angelica sinensis* Diels is from China and *Angelica acutiloba* Kitagawa is from Japan, known as *Yamato toki*. The latter is said to have derived from the cultivation of a wild species. The quality of *Yamato toki* was developed using traditional methods such as the *mekuri* practice of removing buds from the previous year in the spring of the second year. This practice inhibits blossoming and prevents the root from becoming fibrous, thereby becoming strong and consolidated.

Saikaku's philosophy on herb cultivation and the Morino-Kyuyakuen both provide important keys to dealing with the contemporary challenges of preserving biodiversity and enabling the stable domestic production of crude drugs. The greatest achievement of the successive Morino family lies in the methods they developed - herb cultivation, processing of crude drugs, naturalization of foreign plants and domestication of wild plants - and the ancient wisdom that was openly shared, and which has been utilized to this day.

Short CV:

Kyoko **Takahashi**, Ph.D. Pharmacist Graduated University of Toyama, Faculty of Pharmaceutical Science, 1997~1999; Visiting researcher at the University of Kansas School of Pharmacy, 2004~; Research Associate, Institute of Natural Medicine, University of Toyama, 2006~; Associate professor, the Museum of Osaka University and Graduate School of Pharmaceutical Sciences, Osaka University. 2013~; Advisor at the Kochi Prefectural Makino Botanical Garden, 2017~; Associate professor Co-Creation Bureau Office of Community-University Co-Creation

A Graphic Narrative Approach in Exploring the Development of *fukushin* in Japanese Kampo Medicine

Gretchen De Soriano

Kampō UK Association, London, United Kingdom



Images are considered as being *received* and of conveying information instantaneously, historically seen as a popular format within a non-academic environment, whereas writing is *perceived* and requires specialized knowledge or training to decode the abstract symbols of language.

The modality of the *graphic narrative* within academia is showing a rapid development, for example; a Columbia University PhD thesis presents a *graphic narrative* format and annotates with traditional footnotes and bibliography; *Logicomix*, a *graphic narrative* in the field of mathematics explains Bertram Russell's "sets theory"; within the London Wellcome Library of Medicine Public Health section are contained *graphic medical narratives* addressing such topics as HIV, communicable liver disease, and mental illness.

My continuing study of *fukushin* and its development in Kampo Medicine has led me to adopt a *graphic narrative* approach to the presentation and development of this pre-modern Edo Kampo diagnostic device. A central part of this work is to consider how the public came to rely on *fukushin*, and how physicians developed the skills to perform *fukushin*. I will interpret elements found in Edo literature and illustration using themes and vocabulary common to medical historians and to medical anthropologists. Through the modality of the *graphic narrative*, a broad range of readers will be able to engage with my findings on the *fukushin* process through the instantaneous recognition of imagery guided by simple phrases. It is intended for a broad audience in a world where communication is ever-more active and responsive. I would argue that the route for dissemination for some scholarly research should consider a graphic narrative interface.

My proposal is to communicate these findings and analysis through the modality of the graphic narrative using symbols, icons, drawings, and visual stimuli. (Each reader will individually interpret the series of four images found at the title of this abstract; the kanji can serve as an element within an image, or as words. Here the *writing* element is the calendar year.)

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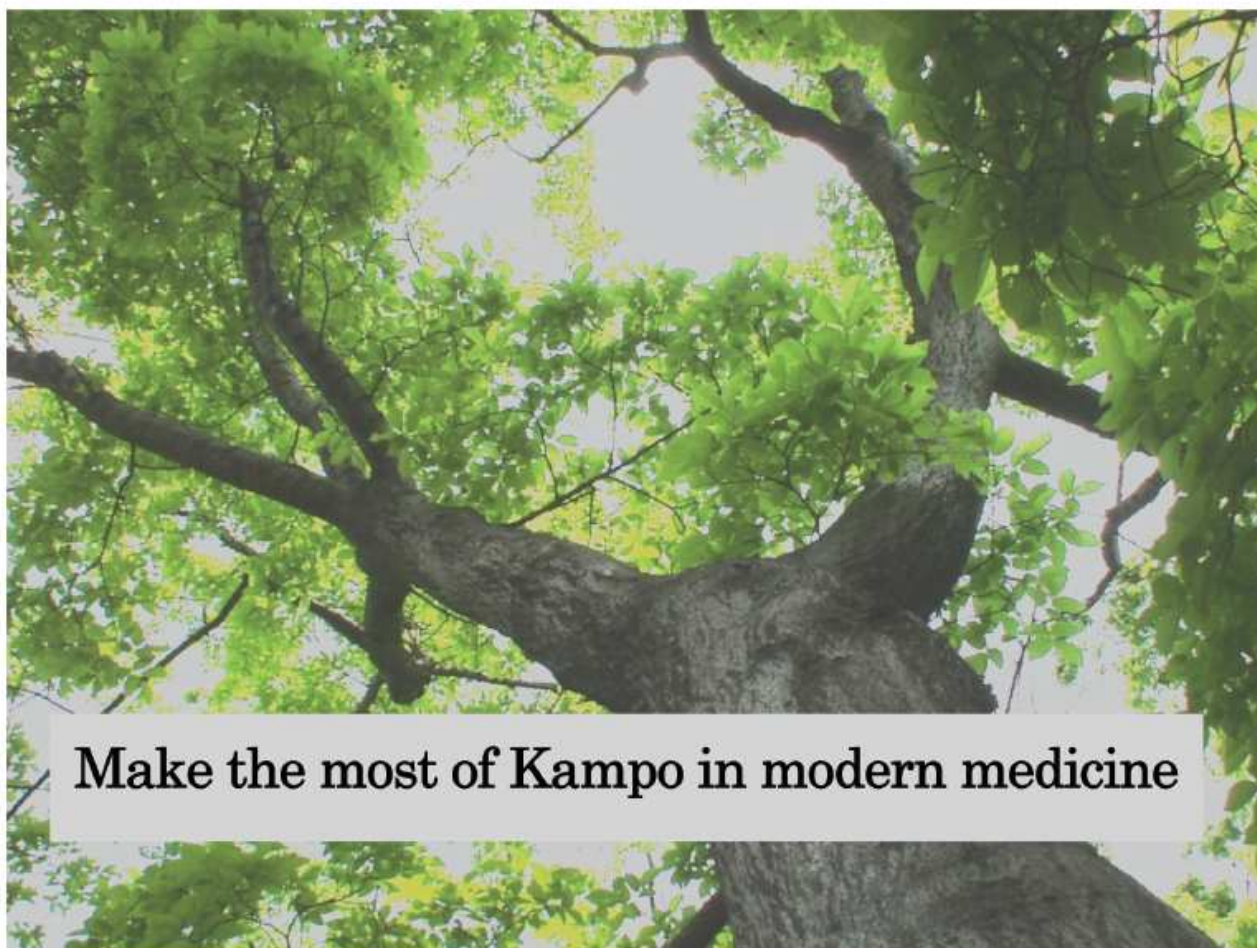
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A Neonatal huge Cervical Lymphatic Malformation Successfully Treated with *eppikajutsuto* and *ogikenchuto*: A Case Report

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²⁾Department of Pediatric Surgery, Osaka University Graduate School of Medicine, Suita, ³⁾Department of Medical Technology, Osaka University Hospital, Suita, ⁴⁾Department of Diagnostic and Interventional Radiology, Osaka University Graduate School of Medicine, Suita, Japan

Background: Recently the application of Kampo, or Japanese traditional medicine, to lymphatic malformation (LM) has been reported, but there are no reports of its effects against neonatal LM. We herein report a case of a neonatal huge cervical LM successfully treated with *eppikajutsuto* and *ogikenchuto* without tracheostomy or sclerotherapy.

Case presentation: A baby boy with a huge cyst in his right neck was delivered by Caesarean section without a prenatal diagnosis. The cyst extended and slightly compressed the trachea on the 7th day after birth. Although we planned sclerotherapy with OK-432 followed by tracheostomy, his parents refused tracheostomy. Therefore, we started the administration of *eppikajutsuto* (0.5 g/kg/day) on the 26th day of life instead of sclerotherapy. As the cyst was slightly enlarged at the beginning of *eppikajutsuto* administration, we increased the dose of *eppikajutsuto* to 0.75 g/kg/day and added *ogikenchuto* (0.4 g/kg/day), expecting greater regression of the lesion than with the initial regimen. After a few days, the cyst started to diminish in size. Six months later, magnetic resonance imaging showed remarkable regression of the LM without tracheal compression.

Conclusions: The combination of *eppikajutsuto* and *ogikenchuto* was thus found to be effective in the treatment of a neonatal LM. This is the first report to demonstrate that the dose-escalation of *eppikajutsuto* may therefore be effective without any severe adverse effects, even in neonates.

Short CV:

Keiko **Ogawa** MD, PhD, Prof. was graduated from Nagoya University, School of Medicine in 1997. She became board certificated Pediatric Surgeon in 2001. She studied regeneration of organs from ES cells from 2000 to 2004 at Nagoya University Graduate School of Medicine and obtained PhD. She joined Kanazawa University Hospital, as associate professor in 2011. She became Professor of Department of Japanese-Traditional (Kampo) Medicine in Kanazawa University Hospital in 2015. She is continuing her research of Kampo medicine for various diseases, especially for pediatrics, vascular malformation, cancer, and infection. She is also the Chairman of the Committee of Foreign Affairs of JSOM since 2016.

Efficacy of Kampo Medicine for Pediatric Diseases Refractory to Western Medication: Survey of Japanese- Oriental (Kampo) Medicine at Chiba University Hospital

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Background: In Japan, traditional Kampo medicine has been given to children for >1,000 years. Approximately 90% of Japanese physicians still use Kampo medicine, and there are many positive reports about its use in children. Most pediatric patients are not treated with Kampo medicine as the first-line treatment. In many cases, Kampo medicine is used to treat children for whom Western medicine has been ineffective. There are few studies of the effects of Kampo medicine for patients who are refractory to Western medication. We retrospectively analyzed the cases of 98 children with chronic diseases refractory to Western medication who were referred to our department for treatment with Kampo medicine.

Methods: This was a retrospective observational study. The investigation period was April 2007 to April 2017. The patients were 0–15 years old at the first visit. We analyzed the patients' sex, age, complaints, number of visits, referral source, and prescription(s). The main disease complaints were classified by ICD-10. All data were extracted from our hospital's medical records. We investigated which prescription was most effective for the improvement of the patients' diseases. We classified the evaluation criteria into four stages (aggravated, constant, mild improvement, improvement) according to the patients' subjective symptom improvement status. We divided the patients by age: pre-school (0–6 yrs old; n=21), Elementary school (7–12 yrs old; n=37), and Junior High school students (13–15 yrs old; n=40).

Results: Improvement or mild improvement occurred in 78% (77/98) of the patients. No aggravation was identified. Seventy percent of the children were referred by a pediatrician. Their diseases varied; e.g., atopic dermatitis and orthostatic dysregulation. Among the effective prescriptions, *Ogi-kenchu-to* (12%) and *Sho-kenchu-to* (12%) were used frequently, but there was no clear relationship between the prescriptions and specific diseases. The same Kampo medicines were used for multiple diseases.

Discussion: Most non-specialist physicians select a Kampo medicine according to the disease (i.e., a Western diagnosis). However, Kampo specialists (including our department) use their traditional diagnostic methods (*sho*) to determine the prescription. Our analyses indicate that Kampo medicine was effective for symptoms that did not improve with Western medicine alone, because of the Kampo medicine-specific and symptom-oriented approach. Various prescriptions are not limited to the name of the disease. Kampo medicine involves the subjectivity and experience of the physician in deciding on a prescription. A further accumulation of evidence regarding the effectiveness of Kampo medicine is needed.

Conclusion: Kampo medicine can be effective for children whose conditions are refractory to Western medicine.

Short CV:

Yuki Watanabe, Chiba University graduate student (Master's Course, 2nd grade); acupuncture and moxibustion practitioner since 2014.

Perspectives on the Use of *ninjin'yoeito* in Modern Medicine: a Review of Randomized Controlled Trials

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Background: *Ninjin'yoeito* (NYT), a traditional Japanese (Kampo) medicine that originates from China, has been used to treat *qi* and blood deficiency based on its original concept. Kampo medicine has been widely used to treat many conditions and disorders in modern medicine.

Aims: We reviewed randomized controlled trials (RCTs) of NYT and discussed various standpoints regarding its use in modern medicine.

Methods: We searched PubMed, Cochrane Library, and Evidence Reports of Kampo Treatment for articles written in English, and Ichushi, J-Stage, and Evidence Reports of Kampo Treatment for those written in Japanese. Articles published before January 1, 2019 were retrieved using the keywords "*ninjin'yoeito*" and "*ninjin'yoeito*", and RCTs were selected from these extracted articles.

Results: Of 724 articles, 49 were clinical studies, 15 were case reports, and 36 were experimental studies using NYT. NYT was evaluated for its use as a treatment for cancer and related conditions, refractory blood diseases, and otorhinolaryngologic diseases in 13 RCTs. Ten were categorized as "the side effects of Western medicinal treatment are mitigated when combined with Kampo treatment" and the remaining 3 categorized as "treatment effect of Kampo medicine is increased in combination with standard Western medicinal treatment".

Conclusion: Several studies demonstrated the efficacy of NYT in refractory diseases and other conditions, and the accompanied side effects of treatment with western medicine and when it is combined with NYT in modern-day clinics.

Short CV:

Shin Takayama M.D., PhD. graduated from Miyazaki Medical College in 1997 and from Tohoku University Graduate School of Medicine in 2010. He is an associate professor at the Tohoku University Hospital. Fellow of the Japanese Society of Internal Medicine, the Japanese Circulation Society, the Japan Society of Oriental Medicine, the Japanese Society of Balneology, Climatology, and Physical Medicine, and the Japan Primary Care Association.

Investigation of Kampo Medicine Prescribed during Hospitalization in Tohoku University Hospital

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¹School of Medicine, Tohoku University, Sendai; ²Department of Education and Support for Regional Medicine, Department of Kampo Medicine, Tohoku University Hospital, Sendai, Japan

Background and Aim: The Japan Kampo Medicine Manufacturers Association reported that 92% of prescription medicines in Japan are Western medicines; thus, the prescription of Kampo medicines seems rare. Here, we investigated the prescription status of Kampo medicines in Tohoku University Hospital (TUH) during hospitalization and discussed the needs for Kampo medicine in modern medicine.

Methods: Patients admitted in the TUH between October 1, 2013, and September 30, 2018, were identified from medical records. Information on the number of patients who received medicines, the number of the patients who received Kampo medicines, the type of Kampo medicine, and the number of Kampo prescriptions in 46 departments was collected.

Results: During 5 years (from 2013 to 2018), approximately 10% of all departments prescribed Kampo medicine every year. From 2017 to 2018, Kampo medicines were prescribed to geriatric patients in 48%; liver, gall bladder, and pancreatic surgery in 38%; psychosomatic medicine in 29%; gynecology in 25%; cardiovascular surgery in 24%; rehabilitation in 20%; and to 18% in psychiatry departments, respectively. Frequent prescriptions included *daikenchuto*, *rikkunshito*, and *yokukansan*. The ophthalmology and infectious diseases departments did not prescribe Kampo medicines.

Discussion: A bias in Kampo medicine prescription by medical departments was observed in this study. *Daikenchuto* and *rikkunshito* were used for postoperative complications in gut motility, and *yokukansan* was used for the prevention of delirium during hospitalization.

Conclusion: Although the need for Kampo medicine prescription changes depending on the disease and symptoms, Kampo medicines are needed in modern medicine also during hospitalization of patients.

Short CV:

Ryo **Sugimine**, third grade student in Tohoku University School of Medicine, Sendai, Japan

Challenges of Intercultural Terminology: Brazilian Portuguese Denominations for Kampo Medicine Nomenclatures

Kazusei Akiyama

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The dissemination of knowledge as well as the education is the first step towards the introduction and development of a traditional medicinal method outside its place of origin. Such a traditional medicine is strongly linked to the culture and customs of the site where it was born. Thus, the great challenge at this step is the translation and interpretation into the language of the target country if we want to introduce such a different medicine. If not enough care is taken in this stage, we will be subject to confusion not only about the denomination but also of the concept. The worst example in Oriental Medicine is the word "acupuncture point". In the original language, it is called *keiketsu* (経 穴), which means "hole". When translated as "point", a different notion was given.

The author had the opportunity to do the medical review of the first publication on Kampo Medicine in Portuguese, a translation of Watanabe Kenji's book, "Clinical Pearls for Kampo Medicine". The most challenging part was the definition of the names in Portuguese for the nomenclatures used in Kampo Medicine. The table shows a few examples for Kampo transcription into Brazilian Portuguese language. Please note that no specific wording exists and that the meaning can sometimes only be described.

Japanese Nomenclature		Portuguese Denomination
Kampo Igaku	漢方医学	Medicina Kampo
Sho	証	padrão
Kyojitsu	虚実	deficiente-excessivo
Rokubyoi	六病位	Seis Estágios da Transformação da Doença
Kiketsusui	気血水	Teoria de Qi, sangue e fluido
Kyosho	虚証	padrão ou constituição deficiente/fraca
Jissho	実証	padrão ou constituição excessiva/forte
Kansho	寒証	padrão ou constituição fria
Netsusho	熱証	padrão ou constituição quente
Kannetsusakuzatsu	寒熱錯雑	constituição complexa frio e quente
Taiyobyō	太陽病	estágio Taiyang
Kikyo	気虚	deficiência do Qi
Kigyaku	気逆	refluxo do Qi
Oketsu	瘀血	estagnação do sangue
Suidoku	水毒	distúrbio do metabolismo de fluido
Kyojitsu	虚実	fraco e forte
Fukushin	腹診	exame abdominal
Shinkahiko	心下痞硬	congestão e rigidez no epigástrico
Kyokyokuman	胸脇苦満	plenitude no rebordo costal

Complete translation list is available on www.kampo.med.br.

Short CV:

Kazusei **Akiyama**, MD, MPH, PhD. Graduated from University of São Paulo, Faculty of Medicine and from Federal University of São Paulo, School of Medicine. 1990-1995 Research Fellow at The First Department, The Research Institute of Oriental Medicine, Kindai University, Osaka. Since 1995, General Practitioner at private clinic, São Paulo, Brazil.

A Case-Series of 10 Patients with Female Hormonal Imbalance (*Chi-no-michi* syndrome) successfully treated with *nyoshinsan*

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Kitasato University, Oriental Medicine Research Center, Tokyo, Japan

Nyoshinsan is one of the Kampo formulations for treating anxiety of female specific symptoms such as hot flash or dizziness. The original text of *nyoshinsan* is “Futsugo-yakushitsu-hokan” written by Sohaku Asada (1815-1894). *Nyoshinsan* is composed of 13 herbs; Cyperi rhizoma (4.0 g), Ginseng radix (1.5 g), Cnidii rhizoma (3.0 g), Arecae semen (2.0 g), Atractyodis Lanceae rhizoma (3.0 g), Coptitis rhizoma (2.0 g), Angelicae radix (4.0 g), Glycyrrizae radix (1.5 g), Scutellariae radix (2.0 g), Carophyllis Flos (0.5 g), Cinnamomi cortex (3.0 g), Saussureae radix (2.0 g), and Rhubarb (adjusted). The combinations of these herbs are thought to be useful for adjusting blood circulatory function, clearing away heat and regulating vital energy, while improving digestive function.

According to the original text, *nyoshinsan* has been prescribed to patients suffering from “*chi-no-michi*” syndrome (characterized by physical and/or mental symptoms related to female hormone variation). However, *nyoshinsan* is less frequently prescribed than the so-called “three major formulas in the gynecological field” including *tokisyakuyakusan*, *kamishoyosan* and *keishibukuryogan*. Furthermore, few case-series of *nyoshinsan* have been reported so far. To elucidate the clinically useful indication (“*sho*”) of *nyoshinsan*, we retrospectively analyzed the medical records of the patients who have been prescribed *nyoshinsan* for the past 5 years in our institute.

18 women have been prescribed *nyoshinsan* during the periods of observation, and 10 of them seemed to be effective. We surveyed and analyzed these 10 women in detail about background and disease pattern, subjective and objective symptoms, and duration of taking this formulation.

As a result, the average age of them was 46.7 years old (36-56 years old) and the average BMI was 21.5 (18.7-24.6). The duration of intake of *nyoshinsan* ranged from 2 months to 42 months, and the average was 10.3 months. Kampo-based analysis shows that the majority of patients presented symptoms like impatience or depression caused by blood stasis and qi-abnormality, including qi-deficiency, qi-stagnation and qi-counterflow due to physical or mental stresses. On the other hand, they rarely presented signs of fluid retention. These findings may be useful for clarifying the clinical application of *nyoshinsan*.

Short CV:

Eiko Mori, MD; 2008 graduated from School of Medicine, Nihon University, Tokyo; 2008-2010 Clinical Training, Tokyo Rinkai Hospital; 2010-2016 Obstetrics and Gynecology, Nippon Medical School, Tokyo; since 2017 Kitasato University Graduate School of Medical Science and Kitasato University, Oriental Medicine Research Center, Tokyo, Japan

Flipped Class using Kampo E-Learning System in Medical and Pharmaceutical Schools

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¹⁾Kanagawa Institute of Industrial Science and Technology, Kanagawa, Japan; ²⁾Kampo e-learning Committee, Japan

The World Health Organization (WHO) released the International Classification of Diseases 11th Revision on 18 June 2018, which includes five new chapters, and one of them is a chapter of traditional medicine conditions. Traditional medicine is being re-evaluated worldwide, and integrated medicine that combines traditional medicine and modern medicine is expected to be featured.

In Japan, this integrated medical treatment has been performed since Kampo drugs were covered by the national health insurance program in 1967, and now, more than 90% of physicians prescribe Kampo drugs in daily practice. However, most of the physicians ignore Kampo theory and prescribe Kampo drugs based on Western disease names, because Kampo education is not sufficient enough in medical and pharmaceutical schools.

We constructed a Kampo e-learning system granted by the Ministry of Education, Culture, Sports, Science and Technology in Japan. Using this e-learning system, several medical and pharmaceutical schools started flipped classes. We are verifying these flipped classes. Based on the results of this verification, we have established a useful class model as below.

The model class contains three sessions. Before each session, students study assigned Kampo e-learning courses. In the session, a teacher shows case summaries and asks students about the Kampo diagnosis and a proper formula. Then the teacher shows the right answer and gives an explanation.

The contents of each session are summarized as below:

- 1st session: "deficiency and excess", "cold and heat", "sixth stages", "qi, blood and fluid", "common cold" and "menopausal syndrome". The purpose of this session is to understand the basic Kampo theory, especially six stages through cases of common cold.
- 2nd session: *Shishin* (four Kampo diagnostic procedures). The purpose of this session is to understand the characteristics of Kampo diagnosis procedures.
- 3rd session: "Effects of Kampo drugs for gastrointestinal diseases", "Alleviation of side effects caused by anticancer chemotherapies and irradiation". The purpose of this session is to understand the frequently used Kampo medicines in common clinical setting.

The development of a model Kampo class contributes to the standardized education to support medical and pharmaceutical students, leading to proper selection of Kampo drugs and precise drug information based on Kampo theory. In addition, flipped class with Kampo e-learning system can be implemented even in a school with a shortage of Kampo experts.

Short CV:

Aki Ito, R.Ph; graduated from Tokyo University of Science in 1990. 1990-1992; worked at central laboratory, Shionogi & Co., LTD., 2000-2003; worked at Hachijo Hospital Pharmacy, 2003-2006; worked at Keio University Hospital Pharmacy. Since 2006, has been working at Aoyama Pharmacy. Since 2013, has been working at Kanagawa Institute of Industrial Science and Technology. 2010-2012; was a member of research group granted by the Japanese National Cancer Center. I am a member of the Japanese Society for Oriental Medicine, the Pharmaceutical Society of Japan, and the Japan Kampo Shoyaku Sommelier Association.

Two Cases of Immune Thrombocytopenia Successfully Treated with Kampo Medicine

Chiho Otani, Sadahiro Tamashima

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Introduction: Immune thrombocytopenia (ITP) is an autoimmune disorder characterized by thrombocytopenia. Therefore, the therapeutic goal is to maintain platelet count at a level that prevents hemorrhage. In cases of childhood ITP, the platelet count often improves quickly. Treatment options for patients with markedly decreased platelets and hemorrhagic symptoms include intravenous immunoglobulin (IVIG) and corticosteroids. In adults with ITP, *Helicobacter pylori* (*H. pylori*) eradication therapy and corticosteroid treatment are performed. In treatment-refractory cases, and cases wherein corticosteroid treatment is difficult to continue due to side effects or complications, thrombopoietin receptor agonist treatment is performed. In the cases of life-threatening bleeding, IVIG is administered. While there are not so many reports on Kampo medicine for ITP, we sometimes experience cases with increasing platelet counts after Kampo medicine. Here we report one case each of childhood ITP and adulthood ITP successfully treated with Kampo medicine.

Case presentations: **Case 1** was an 11-year-old boy with a history of developing ITP at 2 years of age and had improved platelet count with corticosteroid treatment. He presented with thrombocytopenia after influenza and gastroenteritis and was diagnosed with ITP at another hospital. His platelet count increased posttreatment with IVIG and corticosteroids. After corticosteroid treatment was discontinued, his platelet count decreased again to $3 \times 10^9/l$; thus, a second dose of IVIG and corticosteroid agent was administered to the patient. As the platelet count decreased concomitantly with decreasing corticosteroid dose, he visited our clinic and requested Kampo medicine. He had a weak constitution. Following *Shokenchuto* administration, his platelet count increased, and the corticosteroid dose could be reduced.

Case 2 was a 78-year-old woman, a hepatitis B carrier, who presented with lower extremity petechiae and thrombocytopenia and was diagnosed with ITP at another hospital. Her platelet count was $9 \times 10^9/l$, and corticosteroid treatment was initiated. After a temporary increase, the platelet count decreased following discontinuation of corticosteroids. *H. pylori* eradication therapy was ineffective. She visited our clinic to request Kampo medicine. *Rokumigan*, *bakumondoto*, and *keishibukuryogan* were administered to the patient in combination, and her platelet count increased.

Discussion: We used Kampo medicine in accordance with 'Sho' for two patients with ITP, and their platelet counts increased. Kampo medicine may be effective for treatment-refractory cases, cases wherein it is difficult to reduce the corticosteroid dose, cases wherein corticosteroid treatment is difficult to continue due to side effects or complications, and cases wherein the platelet count is reduced while the patient is followed up without active intervention and may be beneficial to include in ITP treatment options.

Short CV:

Chiho **Otani**, MD, specialist in Kampo Medicine and in Hematology, Graduated in 2001 from Hamamatsu University School of Medicine; 2001-2002 Department of Internal Medicine 3, Hamamatsu University School of Medicine; 2002-2004 Department of General Internal Medicine, Seirei Hamamatsu General Hospital; 2004-2014 Department of Hematology, Seirei Hamamatsu General Hospital; 2014-present Tamashima Clinic of Hematology and Kampo Medicine, Shizuoka, Japan

Clinical Reasoning in Kampo Medicine Applying the Dual-process Theory to Historical Kampo “*sho* scripts”

Mitsuyuki Takamura

Kampo Medicine Outpatient Clinic, Mie University Hospital, Tsu, Japan

One of the works that formed the origin of the current Japanese Kampo medicine is a book called "*Kampo shinryo iten* (『漢方診療医典』: Kampo medical treatment doctrine)" by Otsuka Keisetsu et al. in which "*zui sho chiryo* (随証治療: Treatment according to *sho*)" is placed at the center of the Kampo treatment principles. Then, what is *sho* exactly?

The commentary on *tokishakuyakusan sho* in the book states that “It is used for abdominal pain during pregnancy and various types of abdominal pain for women. The muscles are all weak and prone to fatigue, abdominal pain may occur in the lower abdomen, and may spread to the lower back or epigastric region in cases where there is no abdominal pain”. It is a description that presents images of persons with tendencies of specific constitutions. Additionally, in other prescription commentaries, *sho* is often presented in a manner that encourages recall of a so-called whole image of a patient and pattern recognition.

This is not only a feature of Japanese Kampo medicine, but also a diagnostic system with features common to the intuitive process used by experts in Western medicine practice. The diagnosing process of specialists in Western medicine is explained by a model called dual-process theory in which intuitive thinking (System 1) and analytical thinking (System 2) are used complementary. For those diseases that are commonly encountered, it is believed that System 1 will be used for prompt decisions. Further, System 1 is often considered as templates based on a description of disease symptoms, so called “illness patterns”.

If this is replaced with Kampo medicine, what is presented as the above-mentioned *tokishakuyakusan sho* is an illness pattern, and is a template mainly used as System 1. In other words, the doctrine of Japanese Kampo medicine, which has been shown in the form of “*zui sho chiryo*” for a long time, bears a considerable capacity in the part inherited in the system of illness patterns. Moreover, it prioritizes the clinical application without analytical thinking corresponding to system 2 by black boxing without deeply mentioning the pathophysiology in the background.

From this point of view, we will use the description of cases left by past Kampo experts as “*sho* scripts”, position them as supplements to actual case experiences, and consider the method used for learning clinical reasoning in Japanese Kampo medicine.

Short CV:

Mitsuyuki **Takamura**, MD, PhD, Assistant Professor of Kampo Medicine Outpatient Clinic, Mie University Hospital, Tsu, Japan. 2000 graduated Mie Univ., Japan. Board certified trainer of the Japan society for oriental medicine, Board certified pediatrician.

A Quick and Resource-saving Preparation Method for Decoction of Kampo formulae inspired by the Method of Boiling Powdered Crude Drugs in the Song Dynasty of China

Tsukasa Fueki

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For the purpose of reducing both the consumption of crude drug resources and patient's burden in preparing the decoctions, we developed a new preparation method for the decoctions of Kampo formulae: immersion of powdered crude drugs in hot water (IPCD method), inspired by a decocting method widely used in the Song Dynasty of China. Crude drugs were powdered, and then immersed and stirred in hot water to extract the ingredients. The sludge residue of powdered crude drugs produced by immersion was precipitated and removed by decantation using a wine carafe.

Using IPCD method, the amounts of non-volatile marker compounds from ephedra herb (dried terrestrial stem of *Ephedra sinica*) and scutellaria root (dried root of *Scutellaria baicalensis*) transferred to the immersion exceeded by 1.3–1.4-fold those obtained by the conventional method of preparation with which the same amounts of cut crude drugs were decocted for >30 min, and the amounts of volatile marker compounds from cinnamon bark (dried bark of the trunk of *Cinnamomum cassia*) and perilla herb (dried leaves and tips of the branches of *Perilla frutescens* var. *crispa*) exceeded compared with those in the conventional decoctions by two- and 30-fold, respectively. The amount of transferred marker compounds in the immersions reached a plateau within 4 min after the beginning of extraction, suggesting that only 4 min of immersion is enough for the IPCD method to extract the ingredients. On the other hand, the short time of heat treatment of this method led to the preservation of the heat-unstable noxious ingredients such as diester alkaloids of unprocessed aconite root (dried root of *Aconitum carmichaeli*) or the acrid raphides of unprocessed pinellia tuber (dried tuber of *Pinellia ternata*) in the immersion.

In conclusion, using IPCD method, the same or greater amounts of marker compounds were transferred in the water in a much shorter time with lower consumption of crude drugs than with the conventional decocting method, and it was outstanding for the decoction of crude drugs containing volatile compounds, while precautions are required for unprocessed aconite root and unprocessed pinellia tuber.

Short CV:

Tsukasa **Fueki**, Pharm.D. Representative director of Matsuya Pharmacy, Niigata Japan; Visiting lecturer of Toho University School of medicine, Tokyo, Japan

Efficacy of Kampo Medicine for Pollen Allergy in Japan

Izumi Kimoto

Hirose Clinic, Aichi, Japan

In Japan, the prevalence of pollen allergy due to cedar and cypress pollen, has increased in recent years. In addition, the patients of pollen allergy are getting younger from early childhood, and there is an increasing number of patients who are also allergic to white birch, alder pollen, and gramineous pollen in the same way as in Europe. Diversification of pollen allergy has also become a problem in Japan, such as prolongation of pollen allergy due to multiple antigen sensitization, and exacerbation of symptoms due to air pollutants.

Antihistamines and topical steroid medications are effective treatments for pollen allergy, but some patients are not satisfied. On the other hand, treatments with Kampo medicines are also performed in Japan for symptoms such as rhinitis and conjunctivitis due to pollen, and for the improvement of constitution.

In our clinic, for about 10 years, treatments with prescriptions consisting of mainly 9 kinds of mixed Kampo extract, have been performed for pollen allergy. We classified them according to local symptoms of allergy, patient's pattern (cold and heat, deficiency and excess, and gastrointestinal condition) and season of pollen. Kampo extract prescriptions that have the most immediate effect and also can be administered for a long season and can be given repeatedly, is *maobushisaishinto* combined with *keishito* with increased cinnamon and aconite in quantity. The second choice is *eppikajutsuto*, its prescription rate continues to increase, especially for young patients, and severe conjunctivitis. All 9 types of Kampo extract prescriptions can be also applied for symptoms of infectious diseases including common cold and bronchitis.

In this presentation, we introduce our Kampo medicine treatment for pollen allergy in our clinic, report our cases and give a consideration.

Short CV:

Izumi **Kimoto** M.D., Ph.D; Board specialist of Japan Pediatrics Society, Japanese Society of Allergology, and Japan Society of Oriental Medicine. 2003-2006: Department of Pediatrics, Nagoya University. 2007-2009: Department of Pediatrics, Kasugai Municipal Hospital. 2010-: Private Clinic for Kampo Medicine and Allergology, Aichi, Japan

Significance of Kampo Medication Complying with the Clinical Demand: Results of a Questionnaire Survey among Japan Society for Oriental Medicine (JSOM) Member Doctors

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The medication of Kampo decoction which can be partly covered by National Health Insurance (NHI) in Japan is facing a difficult time because of rising prices of crude drug materials in China, their main producer. The board of crude drug material of the Japan Society for Oriental Medicine (JSOM) carried out a survey by questionnaires sent to 7416 JSOM member doctors with JSOM approval, and in order to visualize the data of collected 1877 answers (the response rate: 25%), we analyzed them statistically.

Twenty-six percent of respondents said that they had prescribed decoctions, and 29% of respondents with no experience wanted to prescribe crude drugs. Eighty-eight percent of doctors who prescribe decoctions offered medical treatment primarily to insured patients, while 9% offered medical treatment at own expense. This group prescribed decoctions more frequently. Many doctors were aware of the financial risk of prescribing crude drugs imposed by the drug price standard and rising crude drug import prices. Four hundred and fifty-five doctors submitted comments about the situation they require the Kampo decoction. Thirty-five percent of them said they used decoctions when there is no suitable Kampo extract product for the symptoms of the patients. This result implies a necessity for decoctions. Most of the JSOM member doctors used decoctions for diseases which are difficult to treat with Western medicines such as autoimmune or allergic diseases. On the other hand, physicians also tended to use Kampo prescriptions for mild diseases such as limb cramp and constipation.

The major issue of Kampo decoction treatment was the financial problems in management of drug industries and pharmacies. In addition, quality degradation of NHI price listed crude drugs triggered the difficulty of clinical practice in Kampo medication. We therefore calculated the amount of crude drugs used for decoctions to validate the possibility to cover the demand by domestic produced crude drugs if they were preferentially supplied for decoctions.

Short CV:

Yasuhito **Kimura** Mr.; Born 1995, Hyogo prefecture. Nationality: Japanese, Education: 2014~present, A sixth-year student of Faculty of Pharmaceutical Sciences with the department of applied pharmacognosy Graduate School of Pharmaceutical Sciences, Osaka University, 2017~present; Internship at Tochimoto-tenkaido pharmacy, Osaka.

Usage trend of Kampo medicine at a Clinic in a Physician-shortage Area

Natsumi Saito¹⁾, Shin Takayama¹⁾, Akiko Kikuchi¹⁾, Takehiro Numata^{1) 2)}, Ryutaro Arita¹⁾, Soichiro Kaneko¹⁾, Naohide Sasaki³⁾, Tadashi Ishii¹⁾

¹⁾Department of Education and Support for Regional Medicine, Department of Kampo Medicine, Tohoku University Hospital, Sendai 980-8574, Japan; ²⁾Department of Kampo Medicine, Department of Chronic Fatigue Syndrome, National Hospital Organization Yonezawa Hospital, 992-1202, Japan; ³⁾Uwanuma Clinic, 987-0602, Miyagi, Japan

Introduction: Since 92.7% of family physicians prescribe Kampo medicines in Japan, it is thought to be essential not only for routine medical care but also family medicine. However, there are few reports on the usage of Kampo medicine in regions with shortage of doctors. Therefore, we investigated the usage trend of Kampo medicine in Uwanuma Clinic, which is located in a physician-shortage area in Miyagi Prefecture, Japan.

Study design: Retrospective observational study.

Subject and Method: We retrospectively investigated the medical records in Uwanuma Clinic between April 2017 and March 2018. Patient data, Kampo prescriptions, and the diseases or conditions in which Kampo medicines were prescribed were collected from the medical records.

Results: A total of 904 patients (men: 289; women: 615; mean age: 72.1 years) had been prescribed Kampo medicines during the study period, and a total of 34 Kampo medicines were prescribed as formula. The most frequently prescribed Kampo medicines were *mashiningan* (40.3%), *yokukansan* (7.5%), *daikenchuto* (6.5%), *kamishoyosan* (4.8%), and *kikyoto* (3.7%). The most common symptoms for which Kampo medicines were prescribed were constipation, cognitive impairment, climacteric syndrome, and adenoiditis. *Mashiningan* was most frequently prescribed for the treatment of constipation. *Maoto* was prescribed for influenza during the influenza epidemic.

Discussion and Conclusion: Additionally, we found that the number of and variations in formulations of Kampo medicine has increased since July 2017. It is considered that doctors in this clinic who could perform Kampo physical examination and diagnosis started prescribing Kampo medicines for the treatment. Many kinds of Kampo medicines can be prescribed for treatments in a primary care setting. Furthermore, compared to Western medicine, Kampo medicine in Japan is more economical. Therefore, Kampo medicine can contribute to primary care in rural areas.

Short CV:

Natsumi **Saito**, M.D. graduate from Yokohama City University School of Medicine in 2009. Her specialty is in general and family medicine, and she is a fellow of the Japanese Society of Internal Medicine.

The Track and Record of Palpation Sites and Pressure by Kampo Experts using an Abdominal Palpation Monitoring System for Standardization of Abdominal Palpation in Kampo Medicine

Shuji Yakubo^{1,2)}, Masaki Baba¹⁾, Eriko Fukuda¹⁾, Yukiko Ueda²⁾, Tomohiro Hattori^{2,3)}, Takashi Ito⁴⁾, Hiroshi Sato⁵⁾, Takao Namiki⁶⁾, Takashi Nakayama⁷⁾, and Kazufumi Yamanaka⁷⁾

¹⁾Department of Clinical Kampo Medicine, Meiji Pharmaceutical University, Tokyo, Japan; ²⁾Division of General Medicine, Department of Internal Medicine, Japan; ³⁾Department of Pulmonary Medicine, International University of Health and Welfare Ichikawa Hospital, Japan; ⁴⁾Institute of Oriental Medicine, Tokyo Women's Medical University, School of Medicine, Japan; ⁵⁾Department of Health Informatics, Faculty of Healthcare management, Niigata University of Health and Welfare, Japan; ⁶⁾Department of Japanese-Oriental (Kampo) Medicine, Graduate School of Medicine, Chiba University, Japan; ⁷⁾Nomura Techno Co., Ltd, Tokyo, Japan

Kampo Medicine as it exists in Japan makes extensive use of a unique abdominal palpation technique known as *fukushin*, whereby the practitioner applies pressure at specific abdominal sites. In Kampo Medicine, it is believed that the physiological changes that the body undergoes in disease states manifest themselves in the abdominal area. The changes in the abdominal area are known as abdominal patterns, and they make an important contribution to diagnosis in Kampo Medicine.

This is a difficult technique to standardize. To make standardization more effective, we developed a system to track and record the exact locations and measure the pressure as a doctor performs abdominal palpation and display it visually. In a model of a male abdomen we installed 14 sensors, with a view to transmitting the information from the sensors in real time via our custom software to a display attached to a Windows PC system.

To standardize *fukushin*, we have recorded and collected the *fukushin* methods data from expert practitioners with the system. It proved possible to satisfactorily record and display data of the sites palpated and the pressure applied by expert practitioners.

By communicating effectively where an expert practitioner of abdominal palpation applies pressure to a patient's abdomen together with the pressure applied, we expect this system to contribute to the standardization of diagnosis in Kampo Medicine as well as Kampo medical education.

Short CV:

Shuji **Yakubo**, M.D., Ph.D. He worked at Nihon university Itabashi Hospital 1984-2017, since 2000 as a Kampo expert member of Department of Oriental Medicine, Nihon University School of Medicine, 2007-2017 as associate professor of the Department of Integrated Herbal Medicine, since 2017 Professor of Department of Clinical Kampo Medicine, Meiji Pharmaceutical University, and standing director of The Japan Society for Oriental Medicine.

Integrated Treatment for Cancer using Kampo and Western Medicine

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¹⁾Surgery and Internal medicine clinic of Sendai city, Wakabayashi, Wakabayashiku, Sendai, 984-0826, Japan; ²⁾Department of Education and Support for Regional Medicine, Department of Kampo Medicine, Tohoku University Hospital, 980-8574, Sendai, Japan

Introduction: In cancer patients who experience insufficient relief with Western medicine, an integrated treatment approach using Kampo is one of the therapeutic options; e.g. an alternative approach that avoids the side effects of Western medicine for cancer. Herein, we describe some cases treated with a combination of Kampo and Western medicine and discuss the treatment concept.

Case presentation: A 45-year-old male patient underwent resection of the pancreatic body and tail I because of stage IVa pancreatic cancer. Subsequently, he received anti-cancer treatment comprising gemcitabine and 50 Gy of radiation therapy for 3 months. He complained of nausea, appetite loss, hair loss, and whole-body weakness during the treatment; thus, he visited our medical office for a consultation. Kampo diagnosis revealed *qi* deficiency of the spleen and heart with the phlegm in triple heater; Kampo treatment based on the concept of *qi* supplementation and relieving fever were started. After 3 weeks, he felt relief of whole-body weakness. Then, we prescribed *senpuku-kataishasekito* with crude drugs of supplementation and crude drugs to clear internal heat for nausea, leukopenia, and hair loss combined with an anti-cancer drug; he felt remarkable improvement of these side effects. Computed tomography examination revealed multiple lung nodules despite medication; we additionally prescribed crude drugs with anti-cancer effects such as *Scutellaria barbata* Herba and *Oldenlandia diffusa* Herba for 3 years. Surgery for the lung nodules was performed, and gamma knife surgery was performed for brain metastasis, with *goreisan* administered for brain edema. As a result, he survived for 7 years since the diagnosis of terminal cancer. We will discuss more cases of cancer patients successfully treated with Kampo medicine in this presentation.

Discussion: In the treatment concept, Kampo can improve physical strength and immunity before surgery, thus promoting early recovery. It also prevents the side effects of chemotherapy and/or radiation therapy; as a result, maximal treatment effect for cancer can be achieved without loss of quality of life. Kampo can reduce the pain caused by cancer invasion, resulting in reduction in the requirement for opioids in palliative care. Additionally, Kampo slows the progression of the cancer; we encountered some cases of long-term survival far beyond that predicted in cases of treatment with Western medicine.

Conclusion: Kampo treatment may be useful for disease control as well as supportive care in patients with cancer.

Short CV:

Masayuki Shimizu M.D. Completed graduation from Akita University School of Medicine in 1989. Specialist of the Japan Surgical Society. Running a private clinic since 2005. Chairman of The Japan Society for Oriental Medicine Miyagi Prefecture branch and Sendai Chinese Medicine Research Association. Director of Chinese medical research conference and Medical corporation of Kouyokai. Board member of International Association of Pharmaceutical Society and Japan Traditional Chinese Medicine Association.

Procurement of Active Principles and Therapeutics for Kampo-Treatment in Europe

Hans Rausch

Phytochem Referenzsubstanzen, Neu-Ulm, Germany

The basic intention of any global medical system is the gentle, selective and effective therapy of diseases. In addition, prophylaxis is another pillar of keeping people healthy. Therapy by highly trained doctors, starting with comprehensive diagnostics and ending with the correct dosage and administration, is typically based on any kind of chemical (pharmacological) intervention in human physiology. Thus, the provision of suitable therapeutics represents another important pillar in therapy. In its historical development, modern Western Medicine has almost completely abandoned individualization on the individual patient. As a new basic concept, patient-specific biotech pharmaceuticals were integrated into the German Medicines Act, but the millennia-old tradition of patient-specific phytotherapy is still underestimated as a niche therapy.

Although phytotherapeutics in Germany, in contrast to Japan, for example, are not more financed by health insurances, they enjoy high growth rates. The general acceptance of nature-based therapy with fewer side effects should be recognized as a general trend. As a result, phytotherapeutic interventions based on Asian Healing Traditions, such as Japanese KAMPO, Chinese TCM and Korean KOM (Korean Oriental Medicine), are increasingly becoming a further basic medical care for patients, not only in the niche of "not more treatable patients" in Western medicine. Consequently, two fundamentals would be necessary:

1. Inclusion of phytotherapy, including Asian Healing Traditions, in curricular medical training, e.g. at German universities, and 2. Supply of high-quality and legal therapeutics with low side effects on the basis of this different phytomedicine systems.

To date, the legal separation of pharmacy and therapist led to a currently not yet ideal constellation with regard to "non-Western" phytotherapeutics, e.g. KAMPO mixtures. The same framework conditions for synthetic drugs applying also to phytopharmaceuticals in the EU.

The possible legal therapeutics can thus be divided into two large groups:

1. Finished dosage forms
 - in modern dosage forms such as capsules, dragées but also granules
 - they require registration or authorization according to defined uniform criteria
 - currently less than 5 products from TCM, KAMPO etc. are approved or registered in EU
 - quality assurance has to be done according to GMP and pharmaceutical laws
2. Individual mixtures on prescription
 - individually manufactured in the pharmacy
 - on basis of decoction pieces with appropriate quality?!
 - pharmacopoeial criteria and European requirements have to be fulfilled
 - single herb granules (not common in Japan) of appropriate quality for mixtures
 - no quality criteria are currently defined for products (not included in the pharmacopoeias)
 - they are regarded as critical by law
 - often they are just partially tested for contaminants
 - dosage is in most cases wrong: -solvent-drug ratio (SDR) instead of drug extract ratio (DER)
 - therapeutic Drug-Extract-Ratio (DER_{th}) is completely missing!!!

Due to this still relatively uncertain basis, the therapeutic successes of the respective medical doctors are more than significant. Successful therapy therefore requires tested, modernized dosage forms (i.e. convenient) with a well based legal and effective composition in order to meet the pharmaceutical criteria: Safety, Accuracy and Potency for therapeutics. The procurement of such raw materials, intermediate products and products, as well as the establishment of corresponding reliable industrial or manufactural production processes are the challenges for the future of Traditional Asian Medicine in Europe.

Short CV:

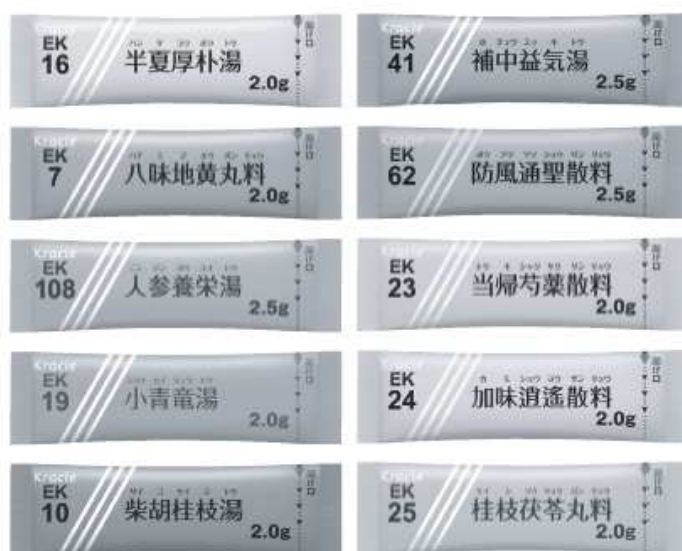
Hans **Rausch**, biologist and chemist, official expert in accordance with AMG §65 with own testing laboratory, university professor, founder and managing director of a company specialized in the production and qualification of legal natural product standards for phytotherapeutics (Phytochem®). Specialist for analysis of natural components and phytotherapeutics for more than 30 years, deputy chairman of the German DIN standardization committee for Asian medicine, as well as German expert in the international ISO standardization procedure for TCM, KAMPO and KOM (ISO TC 249 TCM) since the start at 2009 and deputy convenor and leading expert of Working Group 2 "Quality and Safety of TCM Products"

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