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### Japanese Dental Science Review

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**Review Article** 

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# treatment — Oral pharmacotherapy that utilizes the advantages of Western and Kampo medicines

Introduction to Kampo medicine for dental

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Received 30 May 2017; received in revised form 19 February 2018; accepted 10 March 2018

KEYWORDS Kampo medicine; Oral disease; Oral pharmacotherapy **Summary** Kampo medicine is a medical system that has been systematically organized based on the reactions of the human body. At present, in Western, herbal medicines means the whole herbal product. It is being called Kampo medicine as a medicinal drug in Japan. Since 2012, the ''National Health Insurance Drug Price Standards Related to Dental Treatment'' published by the Japan Dental Association have included seven Kampo formulations. In 2015, the Japan Dental Association sent a ''Kampo Education Plan for Dentistry'' to all dental universities in Japan. Furthermore, the Japanese Society of Oral Therapeutics and Pharmacology compiled a summary of ''Evidence for Kampo Treatment in the Field of Oral Surgery.'' In addition, the phrase ''including wakan-yaku'' was included in the draft core model curriculum for dental education in 2016. Thus, Kampo medicine is expected to rapidly spread to the field of dental care and dental medical education. Therefore, the training of dentists with knowledge of both Western and Oriental medicine is required for the treatment of oral pain, periodontal disease, stomatitis, xerostomia, and other complaints concerning oral health. It is our hope that this paper provides a footing for dentists who wish to learn about Kampo medicine and incorporate it into clinical practice.

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https://doi.org/10.1016/j.jdsr.2018.03.004

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### 1. What is Kampo medicine?

Kampo is a type of "Oriental medicine" which refers to system of medicine. The term ''Oriental medicine'' refers to systems of medicine that originate in Oriental countries, including Traditional Chinese Medicine (TCM), Korean medicine (Koryo medicine), Ayurveda (traditional Indian medicine), and Kampo medicine, among others (Fig. 1). Traditional Chinese Medicine (TCM) was first introduced in Japan from China during the 5th and 6th centuries. During this period, many crude drugs and medical texts were brought to Japan. Until the Muromachi period 14th century to 16th century, diagnosis and treatment was performed according to the theory of Traditional Chinese Medicine that was introduced to Japan, which then subsequently developed independently in Japan. It evolved into and became established as a system of medicine that matches the environment and climate of Japan as well as the physical constitution and lifestyle of the Japanese population.

Kampo medicine as used in the modern medical system can be said to be a ''unique medical system of Japan'' that has been protected and developed as traditional Japanese medicine [1]. Currently, in Japan, 148 Kampo formulations are used for medical purposes. In China and Korea, physicians are classified as physicians of Western medicine, physicians of traditional Chinese or Korean medicine, or dentists who cannot prescribe traditional Chinese or Korean formulations. In Japan, physicians and dentists can prescribe Kampo medications.

## 2. What are the differences between Western medicine and Kampo medicine?

Western medicines, such as analgesics and antibiotics, are usually comprised of a single active ingredient and have a strong effect for one symptom or disease such as lowering blood pressure, killing bacteria, or ameliorating fever or pain. Furthermore, Western medicine, which is the basis of Western drugs, places an emphasis on examination in addition to the patient complaints. Based on the examination results, the physician explores the possible causative diseases and considers appropriate treatments. Thus, it can be said that Western medicine is effective for diseases that can be identified by examination and numerical values, e.g., from biochemical testing. By contrast, because Kampo formulations contain multiple active ingredients, one formulation is effective for various symptoms (Fig. 2) [1].

For example, the active ingredient contained in the nonsteroidal anti-inflammatory agent, ''Loxonin (TM),'' that suppresses pain and fever is loxoprofen sodium (60 mg). By contrast, Kampo formulations contain multiple crude drugs, as seen by the active ingredients contained in kakkon-to (Ch: gé gen tang/En: pueraria decoction) extract granules, which eliminates the symptoms (e.g., cold, stiffness of shoulders) associated with heat in the body: pueraria (4.0g), jujube (3.0g), ephedra (3.0g), licorice (2.0g), cinnamon bark (2.0g), peony (2.0g), and ginger (2.0g).

## 3. Basic approach in the selection of Kampo formulations: the concept of ''patterns''

Many Kampo formulations cannot be fully effective unless they match the physical constitution and symptoms of the patient. In order to determine the constitution of a patient, a measure unique to Kampo medicine is needed. This measure is known as the ''pattern'' (Ch: zhèng/Jp: shō). In Kampo medicine, Kampo formulations are prescribed not only based on the individual symptoms of the patient, but also based on the ''pattern'' that puts a priority on the physical constitution of the patient. Typical patterns include ''vacuity'' (Ch: xū/Jp: kyo), ''repletion'' (Ch: shí/Jp: jitsu), ''qi'' (Ch: qì/Jp: ki), ''blood'' (Ch: xuè/Jp: ketsu), and ''water'' (Ch: shuĭ/Jp: sui). A physician familiar with Kampo medicine selects a Kampo formulation that suits the patient based on that ''pattern'' [2].

### 3.1. Vacuity and repletion

A person with sufficient physical strength and resistance is said to have a ''repletion pattern,'' whereas a frail person with little physical strength is said to have a ''vacuity pattern'' (Fig. 3).

### 3.2. Qi, blood, and water

Qi, blood, and water are factors that indicate disharmony in the body.

When the three factors of qi, blood, and water properly circulate in the body, health is maintained. When one of these factors is insufficient, stagnant, or unbalanced, it Download English Version:

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