Kampo Medicine - Current Research

Clinical Applications of Kakkonto – Part 1

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Introduction

There are 148 different types of medical Kampo preparations, each with its own number. Among them, the most distinguished number—No. 1—is assigned to *kakkonto*.

This is because *kakkonto* is the most popularly used prescription by the Japanese people.

kakkonto appeared for the first time in the great Chinese classic Shokanron (treatise on cold damage) and came to be increasingly widely used in Japan from the latter half of the 19th century. Particularly since Yodo Odai (1799-1870) introduced various indications for the prescription in his work Ruijuhokogi (Interpretations of the Ruijuho (classified assemblage of prescriptions)), it came to be used widely for a variety of diseases. Moreover, such clinical applications of kakkonto differed completely from those in China.

There is a type of traditional performing art in Japan called Rakugo (traditional comic storytelling). Doctors are frequently mentioned in Rakugo stories, but the episode of the "Kakkonto Doctor" is sometimes introduced at the beginning of a story as a lead-in.

"Doctor, my head hurts." "It must be a headache. Take *kakkonto*." "Doctor, my stomach hurts." "It must be a stomach ache. Take *kakkonto*." "Doctor, my eye hurts." "Take *kakkonto*. And you?" "I just came to accompany my husband..." "Take *kakkonto* anyway."

https://www.youtube.com/watch?v=fcYDwMjTgLI

Many who listen to this episode would think that doctors are totally irresponsible people. However, there also those who say completely the opposite—they say that doctors who can cure any disease with *kakkonto* are good doctors.

The episode presents two points, at the least. One is that *kakkonto* is a famous Kampo drug that is well-known throughout Japan. The other is that the prescription is effective for a wide range of indications. In English, *kakkonto* is some

times called Pueraria Decoction, taking the name of the principal ingredient, pueraria root. It is also referred to as Kuz Decoction, taking the Japanese name for pueraria root.

Kakkonto as an extract preparation for medical use

Many Japanese pharmaceutical companies market *kakkonto* as a Kampo preparation for medical use. The grams of each ingredient used in the prescription differ by company, but the *Japanese Pharmacopoeia*, *Seventeenth Edition* stipulates the following.

Method of preparation

	1)	2)	3)	4)
Puerariae Radix	8 g	4 g	4 g	4 g
<i>Ephedrae</i> Herba	4 g	4 g	3 g	3 g
Ziziphi Fructus	4 g	3 g	3 g	3 g
Cinnamonmi Cortex	3 g	2 g	2 g	2 g
<i>Paeoniae</i> Radix	3 g	2 g	2 g	2 g
<i>Glycyrrhizae</i> Radix	2 g	2 g	2 g	2 g
Zingiber Rhizoma	1 g	1 g	1 g	2 g

Prepare a dry extract or viscous extract as directed under Extracts, according to the prescription 1) to 4), using the crude drugs shown above.

Kakkonto as a Kampo preparation for medical use is made by adding an excipient to the crude extract obtained by decocting the above ingredients, and a daily dose of 7.5g is divided into two to three portions. The amounts of each ingredient in the preparation differ slightly by pharmaceutical company, as shown above.

http://www.nikkankyo.org/kampo/info_pi_english/04 8.pdf















Examples of kakkonto extract preparations

Valuation of kakkonto

There are two more types of *kakkonto* preparations that contain an addition of other ingredients. They are *kakkontokasenkyushin'i* and *kakkonkajutsubuto*. The former is prepared by adding 3.0g Senkyu (Cnidium rhizome) and 3.0g Shin'i (Biond magnolia flower-bud) to *kakkonto*, and the latter is prepared by adding 3.0g Sojutsu (Atractylodes lancea rhizome) and 0.5g processed Bushimatsu (Aconiti daughter tuber) powder to *kakkonto*.

http://www.nikkankyo.org/kampo/info pi english/04 9.pdf

http://www.nikkankyo.org/kampo/info_pi_english/04 7.pdf





Examples of *kakkontokasenkyushin'i* extract preparations



Kakkonkajutsubuto extract preparation

Clinical applications

In *Shokanron*, indications for *kakkonto* are acute infectious diseases. However, from Japan's more than 150 years of experience, *kakkonto* is known to have an extremely wide range of indications and is today applied to many diseases, as introduced below.

1. Very early stage of the common cold

Kakkonto is basically classified as an acrid-warm diaphoretic and is used against common colds that develop as a result of invasion by the wind-cold pathogen. However, it is also effective in improving other types of colds in their very early stage.

Yanagi et al. report that kakkonto had the effect of preventing the advancement of the common cold in a study where 40 common-cold patients ages 12 and above were administered two doses of kakkonto extract immediately after experiencing symptoms of a cold, such as chills, nasal congestion, runny nose, sore throat, stiff neck, and joint pain. The patients were regularly instructed to take kakkonto in the early stage of a cold and were able to take the preparation soon after developing a cold. The effective rate was 14/16 (88%) in the group that was administered the preparation within three hours of developing a cold, 12/16 (75%) in the group that was administered the preparation three to six hours after developing a cold, and 2/8 (25%) in the group that was administered the preparation six to twelve hours after developing a cold.1)

The following is a typical case regarding the onset of a common cold.

Case: Onset of a common cold

I make it a habit to take a dose of *kakkonto* extract powder with hot water immediately when I begin to feel chilly or sneeze even once. This makes me feel much better, and the symptoms usually disappear after sleeping soundly for a night, without the cold reaching into my body. Previously, whenever I caught a cold, I used to sneeze profusely for about two days, and from around the eighth day, the cold

would reach my throat and enter my windpipe, such that I would cough for a while, feel a pain in my chest, or had phlegm that would not loosen. At such times, I used to combine and use *shosaikoto* and *bakumondoto*. However, perhaps because *kakkonto* agrees more with my body, taking *kakkonto* at the onset of a cold keeps the cold from worsening, and more importantly, it prevents the cold from getting into my body. Owing to this, I have not caught a cold for more than ten years.

Yakazu Domei, Soukai, Dec. 1975 issue, pp. 93-94

2. Wind-cold type of cold

Kakkonto is frequently used in the initial stage of common colds and is applied particularly to the wind-cold type of cold one to two days after its onset. It is one of the most frequently and commonly used cold remedy in Japan.

The wind-cold type of cold basically occurs when the wind-cold pathogen attacks the early yang region and at the same time penetrates the middle yang skin, where it fights with the healthy qi. Its symptoms include chills, fever (this may appear later), stiffness in the neck and back, and headache, but no sweat is produced, and the pulse is usually floating, rapid and tense.

The shorter the time from developing a cold to taking *kakkonto*, the better. If taking *kakkonto* is delayed, the pattern of the cold may change, and the timing for taking *kakkonto* could be missed.

Hosono states as follows about the effect of *kakkonto* on colds: "Generally, taking a dose of *kakkonto* when you feel you are coming down with a cold and have stiff shoulders, a headache and chills but no sweating, keeps the fever at bay and cures the cold quite easily. If the cold still does not improve, taking another dose after one to two hours does the trick."2)

Fujihira also states as follows: "When I was in school, I used to develop bronchitis whenever I had a cold, and suffered ten days to two weeks of thick phlegm before the cold finally abated. However, after

I began taking Kampo, my cold would sometimes go away in about 5 minutes after taking *kakkonto*."³⁾

In the case of a decoction, it should always be taken while it is warm. Extract preparations should also be taken with warm water as a rule, although there have been reports that tea or cold water was just as effective.

The original text of *Shokanron* notes that after taking *kakkonto*, the patient should consume hot rice porridge, get under the bedding and gradually induce sweating. The rice porridge is not necessarily relevant, but it is important to keep the body warm.

Note that *kakkonto* is suitable for the wind-cold type of cold. For example, the efficacy of *kakkonto* as it is would not be apparent in colds that are accompanied by a sore throat. People who have a cold accompanied by a sore throat frequently retain heat inside their body, because the heat from the cinnamon bark and dried ginger root contained in the preparation further promotes heat. However, by adding gypsum, it is possible to release the accumulated heat from the body. An Eppito prescription may also be added depending on the pathological condition.

It is difficult to objectively evaluate *kakkonto* as a cold remedy, but there is a report as follows.

Yamaoka made a comparative study of the efficacy of *kakkonto* and PL granules by dividing 26 outpatients who made a visit to the respiratory department complaining chiefly of cold-like symptoms into two groups, group A and group B. The result was such that the same level of efficacy against coughing and phlegm was seen in both groups, but *kakkonto* was also effective against fatigability and stiff shoulders. Thus, on the whole, *kakkonto* was effective against many more symptoms.⁴⁾

This study, however, was a comparison made after four doses of each preparation (total of 8 days) and was not designed to examine the efficacy of *kakkonto* one to two days after the onset of symptoms, when it is said to be most suitable.

Many basic studies have also been made on the antipyretic effect of *kakkonto*.

Shiraki applied *kakkonto* to mouse infected with the influenza virus and found that the efficacy of *kakkonto* could be easily explained when considering that it cuts the IL-1 cascade from interferon.⁵⁾

A tremendous amount of cases has been presented to date, but from among them, two typical cases are introduced below.

Case 1: 20-year-old male student

The patient had a slightly heavy head since morning but forced himself to attend class. From around 4 p.m., the headache intensified, and he also began to feel hot.

He made a medical visit at 5 p.m. He had a body temperature of 38.5°C, a pulse that was floating, rapid and excessive, but no particular change in his tongue. No tendency of natural sweating was observed, but the spine from the back of his head to the shoulder blades was extremely stiff. The patient himself was also aware of the tension at the back of his head. He was given *kakkonto* extract and told to go to bed immediately after returning home.

The next day, the patient commuted to school in good health. He said that when he went to bed after taking a dose of *kakkonto*, his body became warm, he experienced a good bout of sweat, and soon fell asleep. He woke up this morning feeling thoroughly refreshed and felt like going to school.

Katsutoshi Terasawa, *Wakan-shinryogaku* (Japanese and Kampo medicine), p. 116, Igaku-shoin, 1990

Case 2: 82-year-old woman

Past medical history / Family medical history: Nothing in particular

History of present illness: The patient was admitted to hospital on January 22, 2008 due to lumbar spondylosis and chronic heart failure. She began to feel chills in the morning of December 1 of the same year and ran a fever of 38°C by noon. She had stiffness in the neck and a headache.

Present illness: Blood pressure 132/68mmHg; pulse 90/min, regular. No pharyngeal redness. No palpating of lymph nodes. No pulmonary sound. No abdominal abnormality.

Observation from the physical perspective of Japanese oriental medicine: Floating, slightly excessive, rapid pulse pattern. Normal tongue pattern. Intermediate abdominal strength, and no other particular changes in abdominal pattern. No tendency of natural sweating. The back of the neck is tense and stiff.

Progress: A half day after developing the cold, the patient's pulse pattern indicated the early yang stage of the cold. As the patient had no tendency of natural sweating and had stiffness at the back of her neck, she was prescribed 7.5g Tsumura *kakkonto* three times a day after each meal. After taking the prescription twice, at noon and night, she produced a large amount of sweat and the stiffness at the back of her neck loosened, so she changed her bedclothes at around 10 p.m. Her fever subsided to 37.5°C. Thereafter, she went to sleep, and in the morning, she had a normal temperature of 36.5°C. Her symptoms, including the stiffness at the back of her neck and headache, disappeared. She took her morning dose of *kakkonto* as her last dose.

Katsutoshi Terasawa, *Koreishanotameno wakan-shinryogaku* (Japanese and Kampo medicine for the elderly), p. 127, 2005

References

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