

## Integrating Kampo and Evidence-Based Medicine (9)

### *Headaches that Emerge Accompanying a Decline in Atmospheric Pressure*

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A rain-praying shrine maiden

Machio Kazeno, a Japanese novelist, writes highly popular historical novels that are also mysteries. Among his short stories, there is a story called “The Disappearance of a Beautiful Rain-praying Woman”<sup>1)</sup>. It is a story about a woman who becomes the talk of the town, because it rains without fail whenever she prays for rain. The story thus begins, without anyone knowing why it always rains when she prays for rain.

However, the main character of the story eventually uncovers the truth. The woman has three younger sisters and two younger brothers who live off her earnings. The woman’s youngest sister closely resembles her rain-praying eldest sister in physical build.

The main character sees the resemblance, and says to the youngest sister, “I bet you can tell when it is going to rain. Am I right?” The young girl answers, “Rain? Well, yes, it often rains a few days after I get a headache, feel lightheaded, or experience a burning sensation on my skin.”

The young girl’s eldest sister also experienced a change in her physical condition a few days before whenever it rained and could thus predict rain, so as a shrine maiden, she prayed for rain whenever she predicted that it was going to rain. Therefore, the truth was that the woman did not have the power to make it rain, but had responded to her clients’ expectations only when she knew it was going to rain.

Reading the above, there are apt to be people who claim the story is unbelievable, and those who claim that they have the same experience. Actually, in Japan today, there are said to be some seven million such people.

Barometer apps

Soon after the principle of the barometer was discovered in the 17th century, it was found that weather deteriorations caused by the approach of a low-pressure system are preceded by a change in atmospheric pressure. The barometer thus came to be used for weather forecasts, and became a particularly important and indispensable tool for ship navigation. In the beginning, mercury barometers were the most common, but thereafter, the Aneroid barometer was invented, and the Bourdon tube barometer also emerged. Today, barometer systems that incorporate a semiconductor sensor and output atmospheric pressure readings as digital signals are widely used.

In fact, iPhone 6 is equipped with a built-in barometer, which not only measures atmospheric pressure, but also warns users of headaches and other illnesses that might be caused by a drop in atmospheric pressure, via a free dedicated app (English/Japanese).

Some types of headaches and migraines are caused accompanying a drop in atmospheric pressure. According to the above-mentioned app, seven million people suffer this symptom.

A considerably large number of people benefit from this app, because when they receive a warning, they can promptly take a prophylactic or hold back on working too much, in anticipation of a headache. It is said that 250,000 people use the app every month.

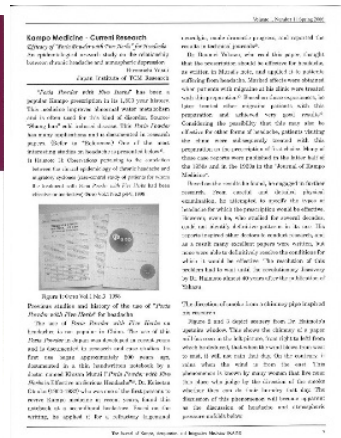


Website for the “Zutool” barometer app

Goreisan

In modern medicine, there is hardly any difference between drugs that are administered for headaches and migraines occurring from a drop in atmospheric pressure and drugs that are administered for headaches occurring irrelevant to atmospheric pressure. That is, they are both taken to control the onset of pain, and do not necessarily prevent pain.

In Kambo medicine, however, there is a drug for preventing headache pains from occurring. In 2005, I introduced a study conducted by Dr. Haimoto in the first issue of this journal (Vol. 1 No. 1). The study found that administering *goreisan* to patients who develop a headache prior to rain is 16.3 times more likely to be effective than in patients who do not experience a headache prior to rain. The odds ratio was 16.3<sup>2)</sup>.



Introduction of Dr. Haimoto's paper in Vol. 1 No. 1 of this journal

The remedy of using *goreisan* against headaches was born from a Japanese physician more than 200 years ago. This clinical pearl had long been forgotten, but was rediscovered approximately 60 years ago, and has since come to be used popularly. Nevertheless, there was no knowing on what occasions it ought to be used. Articles written in the *Shokanron* (Treatise on Cold Damage) and *Kinkyoryaku* (Prescriptions from the Golden Cabinet) were of no use in this regard.

Dr. Haimoto discovered that when smoke from the chimney of a paper mill in front of his clinic flowed in a certain direction, the weather deteriorated on the following day, and on such days in particular, the number of headache patients increased significantly. He also found that administering *goreisan* to these patients prevented the headache from occurring, or prevented it from intensifying even if it did occur. He thus launched a study with his fellow physicians to learn what types of headaches *goreisan* is effective against, and achieved the above-mentioned result.

Barometer apps and *goreisan*

You probably understand now why I introduced the story about the rain-praying shrine maiden at the beginning of this paper. An extremely large number of people develop a headache when there is a drop in atmospheric pressure. Some people may be able to sense a drop in atmospheric pressure like the shrine maiden, but since the majority of people are not as susceptible to changes in atmospheric pressure, barometer apps like the one in iPhone would probably be useful.

Proper diagnosis is the first step to treatment. Kambo medicine provides treatment methods that are not offered by modern medicine. In Vol. 1 No. 1 of this journal, I introduced cases of this type<sup>3)</sup>, but since then, I have successfully treated many similar patients with *goreisan*. Below is an example of one such case.

Case: 31-year-old female

First visit: May 22, XXXX

Chief complaint: Headache

History of present illness: The patient developed a headache at around the age of 18. Since then, the headache has continued till today. It mostly occurred before the weather deteriorated, and occurred more frequently in summer than winter. It was not related to menstruation. There was no pulsating, but vomiting occurred when it intensifies. It constituted an atypical migraine.

Good appetite. Ordinary sleeping pattern.

Dry mouth.

Urination 5 times/day; Bowel movement once/day

Menstruation: Regular pattern

Present conditions: 158 cm, 58 kg

Pulse: Sunken

Tongue: Pale, teeth marks (+), thin white coating (+)

Abdomen: Intermediate abdominal strength, fluid retention in stomach (-). Nothing else in particular.

Prescription: 6.0g *Kracie goreisan*, 3 times a day before meals

Progress: *goreisan* was first administered for two weeks. The headache stopped, so the medication was terminated. However, the patient's headache sometimes occurred thereafter before the weather deteriorated, so she visited the clinic occasionally for a prescription and took the drug when she felt a headache might occur, because she knew that taking the prescription would cure her of her headache. After November, the headache was gone, and she no longer needed to take *goreisan*. In May of the following year (XXXX+1), the patient came to the clinic, saying a headache occurred for the first time in months, so two weeks' worth of *goreisan* was administered. It was typhoon season in Japan then. For about a year thereafter, the patient did not make a visit to the clinic, until June of XXXX+2, when she came regarding a different illness. She said she did not experience a headache during the long interval, so I did not administer *goreisan*.

This patient's case was a typical case in which *goreisan* applied. The only abnormality in the metabolism of water was dry mouth, and nothing else was observed in particular. This meant that no diagnosis could be provided by traditional examination methods. In this patient's case, the observations that a headache frequently occurs before the weather deteriorates, and that it occurs more frequently in summer than winter, bore more importance.

The patient visited my clinic for the first time in May XXXX. The fact that her headaches occurred more frequently in summer than winter was related to Japan's unique weather conditions around this time of year.

The Japanese archipelago lies in the path of typhoons from May to September. In fact, more than thirty typhoons travel through the Japanese islands at the most during this time. All the while, the islands are subject to unstable weather, with atmospheric pressure dropping and rising.

The patient had typical symptoms that were susceptible to *goreisan*, so I administered the drug. As a result, her prognosis was good, and *goreisan* was not no longer needed after a while. However, not many patients necessarily exhibit this progress, and more than a few patients continue to take the drug over several years.



Typhoon information for the area around Japan on July 2, 2017

## Conclusion

Most headaches and migraines that occur accompanying a drop in atmospheric pressure are susceptible to *goreisan*. However, there are some patients whose symptoms do not abate even after taking *goreisan*. In this case, *ryokeijutsukanto* and *hangebyakujutsutenmato* are sometimes effective. Dr. Yan, a friend of mine who runs a clinic in Okinawa, says such headaches are rather more susceptible to *hangebyakujutsutenmato*<sup>4)</sup>. There may be a difference in what prescription is effective depending on the region.

There are regions throughout the world that are subject to large climate fluctuations. To headache patients who live in these regions, *goreisan* might be a dream come true. Meteoropathy is also susceptible to Kampo drugs.

#### References

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