

## Editorial

### *Risk of Reduced Availability of Raw Drugs and Clinical Treatment with Reduced Amounts*

In recent years, the reduced availability of crude drugs for Kampo preparations is becoming a serious problem. The resources of many crude drugs largely depend on the production by China. With China's economic development, Chinese workers engaged in the production have become decreased and the places of production or harvest in China have also lessened as a result of the destruction of environment in the country. It is also a big concern that an increased use of crude drugs in China has been putting a large influence on these problems. Chinese crude drugs supported so far by low rates of Chinese currency yuan had been marketed at relatively moderate prices. Now the exchange rate of Chinese yuan has begun to rise gradually and in the world economic situation of today, the rate will be forced to increase by international pressure from trade frictions. Furthermore, it has been covered by some news media that money inflows in the crude drug market for speculation purposes, making the prices abnormally high.

Securing the permanent availability of crude drug resources and economizing on consumption are imminently required. On the other hand, the amounts of crude drugs used in Kampo prescriptions are saddled with a significant problem. For instance, in the prescription of Ephedra Decoction described in the Song Text of the Shan-han Lun, 4 ryou (old weight unit) of ephedra, equivalent to 50g for a day dosage of today is used. In modern Chinese medicine, individual schools instruct to use the amount roughly equivalent to 9g, which differs depending on individual schools. There are also increasing and decreasing in Japanese schools but they use about 4g. The author has often experienced that some patients had effects from small amounts, while some patients were only responsive to large amounts. It has often been pointed out that there are crude drugs which use ratios to other components are important, whereas there are crude drugs (astragalus root, coix seed, gypsum, ginseng) which use amounts have an important significance. Japan has historically been reliant on imported crude drugs over a long period of time, so that treatment has been made using small amounts of crude drugs for a long time. For this reason, they are shred more finely than in other countries and their selections are carefully made, leading to the establishment of the system to strictly differentiate similar prescriptions. The experiences in the treatment with small amounts as well as the identification system are valuable for future consideration about determining appropriate measures of crude drugs. These will also become a base for future discussions. It has often been pointed out that small amounts of powdered crude drugs often yield effective results. In history, it was the Chinese medicine of North Song that systematically performed treatment with powdered crude drugs. In the North Song times, for making decoctions, crude drugs were mixed and powdered and then a small amount (roughly 3-4 sen for one time) was brewed for administration. This type of medicine is taken as a powder drug variation in other times. Existing various Kampo schools have directly originated from the medicine of the middle Meiji Era and upward and neither sufficient study nor clinical applications of North Song medicine have not been made yet. North Song medicine has neither fully been studied nor clinically applied. Studying the medicine of these days will be of essential importance in the present days when treatment needs to be performed with small amounts of crude drugs.

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