

An ankle sprain with long-term swelling and pain successfully treated with the traditional Japanese herbal medicine Jidabokuippo: A case report

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Abstract

In this report, we present a case in which long-term swelling and pain because of an ankle sprain were successfully treated with the traditional Japanese herbal (Kampo) medicine Jidabokuippo. Jidabokuippo was created in Japan and has been used to treat swelling and pain associated with trauma. A 44-year-old woman sprained her right ankle and received the standard treatments including icing and immobilization for three weeks. However, the swelling, redness, and pain of her ankle continued for two months after the treatments. After initiating Jidabokuippo, her pain and swelling were promptly improved. This suggests that Jidabokuippo is a potentially promising pharmacotherapy for patients with ankle sprain which has not recovered smoothly. It is said that Jidabokuippo can be prescribed simply referring to pain and swelling of the affected areas; therefore, it should be considered as a treatment for trauma patients with long-term swelling and pain.

KEYWORDS

effect of medication, pain, use of medication

1 | INTRODUCTION

Jidabokuippo, which is a traditional Japanese herbal (Kampo) medicine and is translated into English as “a drug for contusions,” has been used in Japan from the Edo period. Jidabokuippo is effective in the treatment of trauma patients who are suffering from pain and swelling.¹ Moreover, two past randomized control trials showed that Jidabokuippo is effective for the pain which is not related to contusions. One showed Jidabokuippo can shorten the duration of treatment in patients with rib fracture compared to nonsteroidal anti-inflammatory drugs,² and the other showed that Jidabokuippo administration before general anesthesia reduced the postoperative pain in patients who underwent tooth extraction with mandible

bone removal.³ However, there are few case reports demonstrating the efficacy of Jidabokuippo for pain and swelling in trauma patients. We experienced a case of long-term swelling and pain because of an ankle sprain successfully treated with Jidabokuippo.

2 | CASE

A 44-year-old woman was suffering from swelling and pain because of an ankle sprain occurring about 2 months before. She sprained her right ankle, and there was no evidence of fracture on ankle x-ray. She received the standard treatments including icing and immobilization for 3 weeks. During the same period, she took loxoprofen sodium

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hydrate (180 mg). However, the swelling, redness, and pain of her ankle continued for 2 months after the treatments. She provided consent to be treated with Kampo medicine and started taking 7.5 g/day Jidabokuippo extract (Tsumura & Co.) because her right ankle had swelling and pain (Figure 1A). Two days later, the redness and swelling of the ankle decreased (Figure 1B). Four days later, they improved further (Figure 1C). And seven days later, her pain had disappeared.

3 | DISCUSSION

A patient who suffered from long-term swelling and pain because of an ankle sprain after receiving standard therapies was successfully treated with Jidabokuippo. To the best of our knowledge, this is the first case report with clinical pictures to show the efficacy of Jidabokuippo for trauma patients. A past systematic review showed approximately 5% to 33% of patients with ankle sprain still experienced pain after 1 year.⁴ Therefore, Jidabokuippo could be a useful medication for patients with ankle sprain which has not recovered quickly.

The precise mechanism of Jidabokuippo is still unknown. There are some pharmacological studies on its crude drugs for reference. Jidabokuippo includes Rhubarb rhizome,⁵ Glycyrrhiza root,⁶ and Cinnamon Bark,⁷ which have been shown to exhibit anti-inflammatory activities. Similarly, Jidabokuippo includes Nuphar Rhizome⁸

and Cnidii Rhizome,⁹ which have been shown to exhibit edema-suppressing activities. These activities may contribute to the therapeutic effects of Jidabokuippo.

This information may be valuable for primary care physicians for the following two reasons. Firstly, ankle sprains are one of the most common musculoskeletal injuries⁴ and the ability to deal with non-internal medicine-related health problems is required for primary care physicians in Japan.¹⁰ Secondly, it is said that Jidabokuippo can be prescribed simply referring to swelling and pain of the affected areas with little regard for Kampo theories such as yin and yang, and deficiency and excess.¹

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CONFLICT OF INTERESTS

Ryo Yoshinaga and Eiichi Tahara have received lecture fees from Tsumura & Co.

AUTHOR CONTRIBUTIONS

R.Y. and K.N. performed clinical assessments. R.Y. and E.T. performed data interpretation. All authors significantly contributed to manuscript preparation. R.Y. and K.N. were involved in revising the manuscript. All authors read and approved the final version of the manuscript.

INFORMED CONSENT

We have obtained written informed consent from the patient for publication of this case report.

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FIGURE 1 A, Right ankle after being injured for about two months and before starting Jidabokuippo. B, Right ankle two days after initiating Jidabokuippo. C, Right ankle four days after initiating Jidabokuippo

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