A Homeopathic Arnica Patch for the Relief of Cellulitis-derived Pain and Numbness in the Hand

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ABSTRACT

Objectives: Arnica montana, belonging to the Compositae family, is a plant with a longstanding tradition of relieving pain and/or inflammation in muscles and joints and may thus represent an alternative to nonsteroidal antiinflammatory drugs, which are often ineffective or lead to a number of adverse effects. A homeopathic arnica patch (3X dilution according to the Homeopathic Pharmacopoeia of the United States) was developed to alleviate pain symptoms in the back and neck muscles and joints.

Case Presentation: The present case report describes the treatment outcome after administration of the arnica patch in a 55-year-old female patient with pain in the right hand and numbness in the fourth finger after cellulitis in the palmar area. The cellulitis was treated with antibiotics, but pain symptoms remained at 7 points on a 0-to-10-point visual analog scale (VAS) for pain despite intake of oral ibuprofen and oral and topical application of an arnica-containing complex homeopathic ointment.

Ten arnica patches were dispensed to the patient. She cut the patch into strips to cover all painful areas of the hand and applied them at night. After 3 days, she reported a substantial decrease in pain symptoms (VAS = 1) and a marked decrease in numbness and in the size of a tender nodule on the third metacarpal area. Moreover, the patient was able to sleep through the night without being awakened by the pain. The symptoms declined further during the next 2 days.

Conclusion: This case demonstrates that after a relatively short period of time, the administration of the arnica patch on the hand provided a marked reduction of pain and recovery of functionality of the hand.
Standard medical pain therapy includes physical therapy, oral nonsteroidal analgesic drugs, steroid injections, and surgery. However, due to the high rate of adverse drug reactions from conventional pain medication, the number of patients seeking alternative therapeutic strategies for the treatment of pain has increased.

In addition to standard conventional medical care, use of complementary and alternative (CAM) therapies for routine healthcare is becoming increasingly popular. CAM can be effective for acute pain in the back and joints in terms of pain reduction and improvement in functional status and thus may be an alternative or an effective adjunct to standard therapy. 

*Arnica montana*, belonging to the *Compositae* family, is a plant with a longstanding tradition of relieving pain and/or inflammation in muscles and joints (eg, sprains, bruises, joint pain). As an herbal medicinal product, extracts from the flower are used in topical applications formulated as ointments, creams, gels, or compresses made with tinctures, fluid extracts, or decoctions. The whole *arnica* plant is also widely used in oral homeopathic preparations for the treatment of swelling and for the relief of mouth and throat inflammation. Topical homeopathic applications treat bruises, aches, sprains, insect bites, trauma, arthritis, muscle and/or cartilage pain, chapped lips, irritated nostrils, and acne. Earlier randomized controlled trials (RCTs) with oral homeopathic *arnica* preparations demonstrated that they are effective in the relief of pain symptoms after tonsillectomy (*Arnica* 30C) and cruciate ligament reconstruction (3-5 globuli per day of an *arnica* dilution 30X).

Recently, a patch containing a homeopathic arnica tincture was developed by Chattem, Inc (Chattanooga, Tennessee) for the relief of acute back pain. The 4-in by 8-in patch is manufactured according to the Homeopathic Pharmacopoeia of the United States (HPUS) guidelines (tincture of the whole plant of *Arnica montana*) and contains *arnica* 3X HPUS. The HPUS Class C production method describes an attenuation process where 1 part of arnica tincture is succussed with 9 parts of diluent to produce a 2X attenuation; subsequent attenuations are prepared by succussing 1 part of the preceding attenuation with 9 parts of diluent to produce a 3X attenuation.

**CASE PRESENTATION**

This case report describes the treatment outcome after administration of the *arnica* patch in a female patient who visited a physician because of pain in her right hand. The patient was a 55-year-old massage therapist, white, with a body mass index of 18.8. The patient presented with pain in her right hand after cellulitis in the palmar area; the pain had required hospitalization 1 month prior to the office visit. She received antibiotics intravenously in the hospital; however, she reported a recurrence of chronic pain in the fourth and fifth metacarpal area and numbness in the fourth finger with symptoms worsening at night. On a visual analog scale (VAS) from 0 to 10 with 10 being the highest grade of pain, she rated her pain symptoms at 7. In addition, the patient reported sleeping problems due to her symptoms.

The patient used topical and oral Traumeel (Heel, Baden-Baden, Germany) and ibuprofen (600 mg/d) concomitantly for pain relief. The patient stated that she had no known allergies to any medication.

As a treatment recommendation, 10 arnica patches were dispensed to the patient. She cut the patches into strips to cover all painful areas of the hand and applied them at night.

The patient was scheduled for a follow-up visit 3 days later, at which time she reported a substantial pain reduction to 1 point on the VAS and a marked decrease in numbness. She had a tender nodule on the third metacarpal area that was decreasing in size. Moreover, the patient was able to sleep through the night without being awakened by the pain. A continuation of the patch application at night was recommended.

Two days later (ie, after a total application period of 5 days), the patient reported further improvement of her pain symptoms. She stated that if she used the patch twice daily, the symptoms might improve even further. However, it was difficult for her to apply the patch strips on her hand during the day because of the requirement of frequent hand-washing in her profession. Therefore, she decided to continue using the patch at night. No follow-up visit was scheduled.

**DISCUSSION**

It is reported here for the first time that a topical homeopathic patch containing an arnica tincture seems to be effective in the relief of pain symptoms in the palmar area of the hand. The patient in this case report had suffered from cellulitis in the right hand, which required antibiotic therapy and was associated with significant disability in daily activities and sleep quality. The pain medication she took for 1 month subsequent to the antibiotics (oral ibuprofen and oral and topical Traumeel) for alleviation of recurrent pain and numbness in the fourth finger had no effect.

Nonsteroidal antiinflammatory drugs (NSAIDs) such as ibuprofen and diclofenac are commonly used to limit inflammation and to control pain and appear to facilitate the recovery of functionality. However, these drugs when given orally as chronic pain medication are not always well tolerated. NSAIDs may cause gastrointestinal ulceration and bleeding and are of particular risk for patients with certain diseases, such as cardiovascular disease; patients taking co-medications; and patients who are elderly. Furthermore, the current evidence does not support the use of topical NSAIDs in peripheral neuropathic pain syndromes.

The other pain medication used by the patient was an oral and topical complex homeopathic remedy that has been reported by others to be effective for the temporary relief of acute musculoskeletal injuries, pain, and swelling. In an RCT investigating the effect of this complex in comparison to placebo for pain relief after hallux valgus (bunion) surgery, it was not superior to placebo in minimizing pain or analgesic con-
sumption over the 14 days of the trial, although a transient reduction in the daily maximum postoperative pain score was observed on the day of surgery.10

Another RCT investigated an oral homeopathic arnica preparation for pain relief after carpal tunnel syndrome surgery.13 Sixty-four adults undergoing elective surgery for carpal tunnel syndrome were randomized to take 3 tablets daily of homeopathic arnica 30C or 6C or placebo for 7 days before surgery and 14 days after surgery. Pain, bruising, swelling (wrist circumference), and use of analgesic medication were assessed on days 4, 9, and 19 after surgery. No statistically significant differences between homeopathic arnica and placebo in reducing postoperative complications and pain medication consumption could be observed. In this study, however, one must ask if the oral arnica preparation was an adequate treatment approach for reduction of pain symptoms.

In the case presented here, it is impressive that the pain medications taken for 1 month prior to the application of the arnica patch were not effective. The patient reported a substantial pain reduction and a decrease in size of a tendon nodule in the third metacarpal area by the arnica patch at day 3 after starting the application, and she experienced a further functional improvement after 2 additional days. Thus, after a relatively short period of time, the administration of the arnica patch on the hand provided a marked reduction of pain and recovery of functionality of the hand. The method of cutting the patch into smaller strips to apply them to the painful areas of the hand during the night seemed to be more successful for alleviating pain symptoms than topical application of the arnica-containing homeopathic ointment. It is tempting to speculate that the delivery of arnica via the patch seems to be more efficacious than via an ointment, although penetration studies on the arnica patch to demonstrate bioavailability of the arnica tincture in lower layers of the skin have not been performed.

CONCLUSIONS

The homeopathic arnica patch seems to be an effective and well-tolerated alternative to oral NSAIDs or other oral and topical homeopathic pain medications as its application to painful areas of the hand deriving from a cellulitis resulted in a marked reduction of pain symptoms in the metacarpal area and of the numbness in the fourth finger. Further studies in a large patient population are required to demonstrate evidence for its efficacy and tolerability.

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