Herbal Medicine Review

Comfrey Ointment Gives Better Results in Ankle Sprains than Voltaren Gel

RAYMOND KHOURY


Introduction

Comfrey (Symphytum officinale) ointment has traditionally been used in the herbalist’s armamentarium. Comfrey has numerous pharmacological properties including anti-inflammatory, analgesic and stimulant of granulation and tissue regeneration. The active constituents of comfrey which partially explain its pharmacology include allantoin, mucilage and rosmarinic acid.

The internal consumption of comfrey is prohibited by Australian law as it contains double bond pyrrolizidine alkaloids which are linked to liver toxicity, but the topical application of comfrey is safe and comfrey ointment is readily available.

The purpose of this German study was to compare the efficacy of comfrey ointment against the pharmaceutical drug Voltaren gel in the treatment of unilateral ankle sprains.

Study Details

This study was a double-blind randomised clinical study involving 3 sport medicine centres. A total of 164 participants took part in this study which lasted for 7 days. The average age of participants was about 29 years, they were in normal general health and had an acute unilateral ankle sprain of less than 6 hours duration.

The participants were divided into two groups, one that received comfrey ointment and the other Voltaren gel. In order to compare the efficacy of the two medicines, the researchers assessed ankle pain, pain sensation at rest and movement, circumference of joint swelling and the amount of paracetamol needed by participants. Ankle pain was measured using a calibrated caliper.

Results

In terms of ankle pain, the researchers found that the comfrey ointment group had a statistically better clinical outcome than the Voltaren group.

In regards to pain sensation at rest and during movement, the results showed that participants applying comfrey ointment experienced less pain at both rest and movement than the Voltaren group.

The measurement for ankle sprain tenderness showed that the comfrey group responded better than the Voltaren group.

The results for ankle swelling showed that comfrey ointment produced a better result than the application of Voltaren gel.

The measurement of ankle mobility (dorsal/plantar flexion and abduction/adduction) showed that the comfrey group did better than Voltaren users, even though the difference was not significant.

At the end of the study, all participants had their ankle strain assessed by doctors. The doctors did not know which participants had used comfrey or which had used Voltaren. It was found that 78% of the doctors ranked the comfrey users as having a good or excellent response, compared to 61% for Voltaren users. This difference in favour of comfrey users was statistically significant (p = 0.0130).

The participants also assessed themselves. Of those who used comfrey ointment, 82.2% ranked their response as good to excellent, while only 70.8% of Voltaren users thought that their response was good to excellent, which is a statistically significant difference (p = 0.111).

Clinical Comments

The results of this study will be of little surprise to herbalists who have clinically experienced the rapid and complete healing action of comfrey ointment.

This is the first time that a scientific comparison has been made between comfrey ointment and Voltaren gel for ankle sprains. The results show that in all parameters measured, comfrey had better results than Voltaren, and in some measures, the results were statistically significant.

The results of this study should also be of interest to massage therapists, who see more cases of ankle sprain than herbalists.

Comfrey ointment is not expensive, and a 30 g jar usually lasts a while. Based on the results of this study, it is apparent that comfrey ointment should be included as an item in sports medicine first aid kits.