



Healing Herbs? Treatments for Back Pain

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Back pain is one of the most common presenting problems and one of the most frequent causes of economic hardship and disability from work. Although physicians do prescribe NSAIDs, pain medication, physiotherapy, exercise and sometimes surgery, these modalities of treatment do not have compelling randomly-assigned double blind controlled trials to show their usefulness.

Often, when patients have back pain, they seek out alternative forms of treatment, such as:

- acupuncture,
- massage and
- chiropractic therapy.

The following modalities represent other forms of therapy where research is very scarce:

- cranial sacral therapy,
- Feldenkrais Technique,
- the Mitzvah Technique and
- the Alexander Technique.

Herbs have been used by traditional societies all over the world and many patients take herbs that are given by herbalists, naturopaths or other healthcare practitioners.

Herbal medicine

In 2007, Gagnier, *et al*¹ looked at herbal treatments for back pain and found there to be some proof that certain herbs can be useful. The following is a summary of their findings.

Devil's claw: 50 mg

Devil's claw (*Harpagophytum [H] procumbens*) was tested at a dose of 50 mg in 325 patients in two four-week trials^{2,3} of a standardized extract of harpagoside (a glycoside of *H. procumbens*) vs. placebo for acute episodes of chronic low back pain (LBP) having lasted longer than six months.

Results

There was a significant increase in the number of pain-free patients in the 50 mg harpagoside group over placebo. The percentage with no pain or mild LBP increased over the four-week period, whereas the percentage with unbearable or severe pain decreased.

The pain subscale was significantly improved in favour of the 50 mg harpagoside group.

The authors concluded that there is strong evidence that 50 mg of harpagoside q.d., per dose of an aqueous extract of *H. procumbens*, reduces pain more than did placebo in the short-term in patients with acute episodes of chronic non-specific (NS) LBP.

Devil's claw: 100 mg

In a four-week trial, 197 patients compared standardized *H. procumbens* to 100 mg of harpagoside q.d. vs. placebo.

Results

The number of pain-free patients for at least five days in the fourth week was significantly higher than those in the placebo group or the lower dose (50 mg harpagoside) groups. The percentage of patients with none or mild LBP increased, whereas the percentage with unbearable or severe pain decreased.

It was concluded that there is moderate evidence that 100 mg of harpagoside, per dose of an aqueous extract of *H. procumbens*, leads to a higher number of pain-free patients for at least five days in the fourth week of treatment of acute episodes of chronic NSLBP.

White willow bark

White willow bark (*Salix [S] alba*) was studied in a four-week trial where 210 patients compared a standardized dose of salicin (a glycoside of *S. alba*), 120 mg or 240 mg q.d., against placebo for chronic LBP.

Results

For at least five days in the fourth week, a significant increase in the number of pain-free patients was noted in the treatment groups compared to the placebo group. The number of patients requiring relief medication (*i.e.*, tramadol) during each week decreased significantly compared to placebo. Pain scores, invalidity index and physical impairment also significantly improved in the willow bark groups. Scores for the 240 mg dose were generally more favourable than the 120 mg dose in most categories.

The authors felt there was moderate evidence that, in the short-term, 120 mg of salicin leads to more pain-free patients in the treatment of acute episodes of chronic NSLBP.

Additional studies

Another trial by Krivoy, *et al*⁵ that was designed to test platelet aggregation of *S. alba* extract did not employ clinically relevant outcomes. Although the authors stated that fewer patients in the 240 mg *S. alba* group required rescue medication (*i.e.*, tramadol) than the placebo group, they did not provide any significant data.

An additional trial⁶ of 228 subjects with acute episodes of chronic NSLBP found equal effectiveness when comparing *S. alba* standardized to a daily dose of 240 mg of salicin against 12.5 mg q.d. of rofecoxib in a four-week trial.

Cayenne

In 2001, Keitel, *et al*⁶ randomized 154 patients with acute episodes of chronic NSLBP to a placebo plaster group (N = 77) and a cayenne (*Capsicum [C] frutescens*) plaster group (N = 77) for three weeks.

Results

A significant reduction in pain and total Arhus score (a back pain specific index, including physical impairment,

pain and disability scores) was observed in the *C. frutescens* group compared to the placebo group. Physician global ratings of efficacy were considered excellent or good in 75.7% of the *C. frutescens* group and in 47.4% of the placebo group. After treatment, 13.5% of the *C. frutescens* group and 6.6% of the placebo group were completely symptom-free.

Additional study

Another study by Frerick, *et al*⁸ of 320 participants with chronic NSLBP were randomly allocated to a placebo plaster group and a *C. frutescens* group for 21 days.

The total Arhus scale score decreased by 33% in the *C. frutescens* group and by 22% in the placebo group. There was also a significant reduction in pain in the *C. frutescens* group compared to the placebo group. The *C. frutescens* treatment was rated as either excellent or good by investigators in 74% of cases compared with 36% for the placebo group. The compliance was reported as being very good or good in both groups.

Therefore, it was concluded that there is moderate evidence that a plaster of *C. frutescens* reduces pain and improves function more than placebo for the treatment of acute episodes of chronic NSLBP in the short-term. However, the studies were of low methodologic quality.



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