

Collected Scientific Research Relating to the Use of Osteopathy with Reflexes

Important:

1) Osteopathy involves helping people's own self-healing abilities to work better, rather than focussing primarily on particular conditions.

2) Each person is different, and osteopathy treats them differently.

Therefore people respond to osteopathic treatment in different ways. Treatments that work for one person cannot be guaranteed to work for another person in the same way. The fact that there is scientific research supporting a treatment in a group of people does not mean that it will always work in the same way (which is probably true of all research).

A number of things make research into osteopathy challenging. These include the two aspects of osteopathy mentioned above, and also the lack of major commercial interests to provide funding in expectation of financial returns. At the same time, there is an emerging body of research demonstrating the usefulness of osteopathic treatment.

Please note: there is room for debate about the classifications used for these studies. Please let John Smartt know if you believe that any of these classifications are incorrect.

These studies are from peer-reviewed journals

Number of studies: 2

Clinically and statistically significant results

Number of studies: 2

Randomised controlled trials

Number of studies: 1

Wynne MM, Burns JM, Eland DC, Conatser RR, Howell JN 2006 **Effect of counterstrain on stretch reflexes, hoffmann reflexes, and clinical outcomes in subjects with plantar fasciitis.** J Am Osteopath Assoc Sep;106(9):547-56 <http://www.ncbi.nlm.nih.gov/pubmed/17079524>

"In a single-blind, randomized controlled trial of crossover design, the effects of counterstrain were compared with those of placebo in adult subjects (N=20) with plantar fasciitis. The subjects were led to believe that both the counterstrain and placebo were therapeutic modalities whose effects were being compared. Ten subjects (50%) were assigned to receive 3 weeks of counterstrain treatment during phase 1 of the trial, while the other 10 subjects were given placebo capsules. After a 2- to 4-week washout period, phase 2 of the trial began with the interventions reversed. "

"No significant changes in the electrically recorded reflexes of the calf muscles were observed in response to treatment. However, changes in the mechanical characteristics of the twitches resulting from the electrical responses were observed. Peak force and time to reach peak force both increased ($P < \text{or} = .05$) in the posttreatment measurements, with the increase being significantly more pronounced in the counterstrain phase ($P < .05$). A comparison of pretreatment and posttreatment symptom severity demonstrated significant relief of symptoms that was most pronounced immediately following treatment and lasted for 48 hours."

"Clinical improvement occurs in subjects with plantar fasciitis in response to counterstrain treatment. The clinical response is accompanied by mechanical, but not electrical, changes in the reflex responses of the calf muscles."

Case contolled studies

Number of studies: 1

Howell JN, Cabell KS, Chila AG, Eland DC 2006 **Stretch reflex and Hoffmann reflex responses to osteopathic manipulative treatment in subjects with Achilles tendinitis.** J Am Osteopath Assoc Sep;106(9):537-45 <http://www.ncbi.nlm.nih.gov/pubmed/17079523>

"The use of OMT [osteopathic manipulative therapy] produced a 23.1% decrease in the amplitude of the stretch reflex of the soleus ($P < .05$) in subjects with Achilles tendinitis. Similarly significant responses were measured in the lateral and medial heads of the gastrocnemius in OMT subjects. The H-reflex was not significantly affected by OMT. In control subjects, neither reflex was significantly affected by sham manipulative treatment. By using a rating scale on questionnaires before treatment and daily for 7 days posttreatment, OMT subjects indicated significant clinical improvement in soreness, stiffness, and swelling."