

Collected Scientific Research Relating to the Use of Osteopathy with Parkinsons disease (motor function in)

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.

More research is being done all of the time. I am not aware of any research which shows that osteopathic treatment, delivered by a qualified osteopath, is ineffective in relation to this area. If you are aware of any studies that show that, please bring them to my attention.

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:
4

Clinically and statistically significant results

Number of studies:
4

Randomised controlled trials

Number of studies: 1

DiFrancisco-Donoghue J,, Apoznanski T, de Vries K, Jung MK, Mancini J,, Yao S 2016
Osteopathic manipulation as a complementary approach to Parkinson's disease: A controlled pilot study. NeuroRehabilitation Oct 31 <https://www.ncbi.nlm.nih.gov/pubmed/27814309>

"BACKGROUND:

Osteopathic Manipulative Medicine (OMM) is a therapy of manual forces that is directed to improve function and homeostasis. It has been shown to improve balance in individuals with dizziness, and improve gait in Parkinson's disease (PD). This study was designed to determine if our pre-defined OMM protocol would improve motor function and balance in individuals with PD.

METHODS:

A randomized controlled trial to test OMM on balance and motor function in PD measured by the Mini-BESTest, Sensory Organization Test (SOT), and MDS-UPDRS. 11 Subjects (age 75 ±16) were randomly assigned to either bi-weekly OMM treatments first for 6 weeks or weekly counseling sessions from a medical provider for 6 weeks as a placebo-control. 9 subjects completed this study.

RESULTS:

There were no significant changes in SOT or Mini BESTest in either group ($p < 0.05$). There was significant improvement in the OMM group for MDS-UPDRS.

CONCLUSIONS:

Our pilot data showed OMM treatment bi-weekly for 6 weeks improved motor function. There were no significant changes in balance, however there were clinically relevant improvements after 6 weeks of OMM. Using a predefined protocol, OMM may be a complementary approach to improving balance and motor function in individuals with PD."

Case controlled studies

Number of studies: 1

Wells MR, Giantinoto S, D'Agate D, Areman RD, Fazzini EA, Dowling D, Bosak A. 1999 **Standard osteopathic manipulative treatment acutely improves gait performance in patients with Parkinson's disease.** J Am Osteopath Assoc Feb;99(2):92-8 <http://www.ncbi.nlm.nih.gov/pubmed/10079641>

"Patients with Parkinson's disease exhibit a variety of motor deficits which can ultimately result in complete disability. The primary objective of this study was to quantitatively evaluate the effect of osteopathic manipulative treatment (OMT) on the gait of patients with Parkinson's disease. Ten patients with idiopathic Parkinson's disease and a group of eight age-matched normal control subjects were subjected to an analysis of gait before and after a single session of an OMT protocol. A separate group of 10 patients with Parkinson's disease was given a sham-control procedure and tested in the same manner. In the treated group of patients with Parkinson's disease, statistically significant increases were observed in stride length, cadence, and the maximum velocities of upper and lower extremities after treatment. There were no significant differences observed in the control groups. The data demonstrate that a single session of an OMT protocol has an immediate impact on Parkinsonian gait. Osteopathic manipulation may be an effective physical treatment method in the management of movement deficits in patients with Parkinson's disease."

Other controlled clinical trials

Number of studies: 2

Suoh S, Donoyama N, Ohkoshi N 2016 **Anma massage (Japanese massage) therapy for patients with Parkinson's disease in geriatric health services facilities: Effectiveness on limited range of motion of the shoulder joint.** Journal of Bodywork and Movement Therapies Apr;20(2):364-72 <https://www.ncbi.nlm.nih.gov/pubmed/27210855>

"METHODS:

(1) Immediate treatment effects: 10 PD patients, in the intervention period with Hoehn and Yahr (H&Y) scale at stage 5, received 30-40 min sessions of Anma massage therapy. In the non-intervention period, six PD patients did not undergo this therapy. The shoulder joint range of motion (ROM) was measured before and after each session. (2) Continuous treatment effects: Six PD patients in the intervention period received the same massage sessions once a week continuously for seven weeks. One week after the completion of the treatment, the ROM of the shoulder joints was measured.

RESULTS:

(1) Shoulder abduction on the more affected side showed immediate significant improvements. (2) Shoulder abduction on the more affected side and less affected side showed notable effects of continuous treatment procedure leading to significant improvement.

CONCLUSION:

The above results suggested the efficacy of successive Anma massage therapy."

Müller T, Pietsch A 2013 **Comparison of gait training versus cranial osteopathy in patients with Parkinson's disease: a pilot study.** NeuroRehabilitation 32(1):135-40 <http://www.ncbi.nlm.nih.gov/pubmed/23422466>

"A physiotherapy subtype is gait training (GT), which aims on correction of posture and gait re-education in patients with Parkinson's disease (PD). Osteopathy in the cranial field (OCF) is a gentle manual method to treat dysfunctions of the central nervous system."

"GT improves walking behaviour with a specific focus on an optimised performance of the necessary movement sequences regarding their accuracy and amplitude. As OCF decreased the interval, it ameliorates speed of motion execution during gait. GT and OCF enhance different aspects of gait in PD."