

Collected Scientific Research Relating to the Use of Osteopathy with Viscero-somatic 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: 3

Clinically and statistically significant results

Number of studies: 3

Other reviews

Number of studies: 1

Lavelle JM 2012 **Osteopathic manipulative treatment in pregnant women.** J Am Osteopath Assoc Jun;112(6):343-6 <http://www.ncbi.nlm.nih.gov/pubmed/22707643>

"Pregnant women experience extensive physiologic and structural changes during pregnancy that affect their daily functioning. The addition of osteopathic manipulative treatment (OMT) to the standard care of pregnant women has been hypothesized to enhance homeostasis and improve quality of life as the body adapts to these changes. Specifically, it has been postulated that OMT can ease pain in pregnant women by eliminating somatic dysfunction and maintaining proper structure. Also, through the viscerosomatic connection, the hemodynamic changes of the maternal body can be controlled, the duration of labor reduced, and the complications of labor avoided. The author reviews the available literature on the use and effectiveness of OMT during pregnancy."

Cohort studies

Number of studies: 1

King HH, Tettambel MA, Lockwood MD, Johnson KH, Arsenault DA, Quist R 2003 **Osteopathic manipulative treatment in prenatal care: a retrospective case control design study** J Am Osteopath Assoc 103(12):577-582 <http://www.ncbi.nlm.nih.gov/pubmed/14740980>

"The use of osteopathic manipulative treatment (OMT) during pregnancy has a long tradition in osteopathic medicine. A retrospective study was designed to compare a group of women who received prenatal OMT with a matched group that did not receive prenatal OMT. The medical records of 160 women from four cities who received prenatal OMT were reviewed for the occurrence of meconium-stained amniotic fluid, preterm delivery, use of forceps, and cesarean delivery. The randomly selected records of 161 women who were from the same cities, but who did not receive prenatal OMT, were reviewed for the same outcomes. The results of a logistic regression analysis were statistically reliable, $\chi^2(4, N = 321) = 26.55; P < .001$, indicating that the labor and delivery outcomes, as a set, were associated with whether OMT was administered during pregnancy."

"The case control study found evidence of improved outcomes in labor and delivery for women who received prenatal OMT, compared with women who did not. A prospective study is proposed as the next step in evaluating the effects of prenatal OMT."

Case reports

Number of studies: 1

Berkowitz MR 2015 **Resolution of hypothyroidism after correction of somatovisceral reflex dysfunction by refusion of the cervical spine.** J Am Osteopath Assoc Jan;115(1):46-9 <http://jaoa.org/article.aspx?articleid=2210638&resultClick=1>

"The author describes the case of a 29-year-old woman who presented with psychosis caused by hypothyroidism, or myxedema madness. Although the patient's psychosis resolved after standard monotherapy using levothyroxine sodium, her hypothyroidism persisted. Imaging of the patient's cervical spine showed that previous C5-C6 and C6-C7 fusions had failed. The failed fusions were corrected, and the patient's hypothyroidism resolved, suggesting that the somatovisceral reflex was the cause of the patient's hypothyroidism. Although somatovisceral reflex dysfunctions are rare, physicians should consider them as potential underlying causes of their patients' presenting medical conditions. "

It is unclear whether the following journals are peer-reviewed

Number of studies:
2

Clinically and statistically significant results

Number of studies:
2

Burns L 1907 **The experimental demonstration of the osteopathic centers: the heart** Studies in the Osteopathic Sciences: Basic Principles 1 <http://www.mcmillinmedia.com/eamt/files/burns1/bur1cont.html>

"Stimulation of the tissues near the fourth thoracic spine caused an increase of as much as fifteen beats per minute in the pulse rate. In those persons in whom the rate was greatly increased, the force of each beat was somewhat lessened. The utmost efforts at stimulation were unable to increase the pulse rate at all in some individuals.

In all, when efficient stimulation was given, the blood pressure was raised. This reaction was no doubt partly due to the simultaneous reflex stimulation of the pulmonary vaso-motors, and in part to the cardiac effects. The rise of blood pressure thus produced may amount to twenty millimeters of mercury in some individuals. In others, the effects are much less pronounced. Efficient stimulation always produces some change, however in a normal person.

The effect of this stimulation upon the sphygmogram is usually very pronounced. In persons whose muscles are very heavy, and who have been of robust health for a long time, it requires a considerable amount of strength to effect the deeper muscles in sufficient degree to effect a perceptible change in the sphygmogram."

" It appears from these experiments that the action of the heart may be affected by somato-sensory impulses from the area of distribution of the fourth thoracic nerves, and that those movements are most effectual which affect the relations of the joint surfaces.

Abnormal conditions affecting the somato-sensory impulses carried over the third, fourth and fifth thoracic nerves may exert a direct influence upon the heart's action.

Any condition which affects the sensory fibers of the vagus may affect the action of the heart."

Burns L 1907 **The experimental demonstration of the osteopathic centers: the pelvic viscera** Studies in the Osteopathic Sciences: Basic Principles Vol 1: 256-257 <http://www.mcmillinmedia.com/eamt/files/burns1/bur1ch29.html>