



**Influence of the osteopathic treatment of the masseter muscle on the mobility of
the cervical spine and the jaw**

Daive Cardazzo

Supervisor: Dr Anne Jakel

Research Paper submitted in partial fulfilment of the degree of

BSc (Hons) Osteopathy for Diplomates

Conversion Degree

British College of Osteopathic Medicine

2014

Journal: Journal of Manual and Manipulative Therapy

Word counting: 2750

Abstract

Background: The cervical spine and the jaw have many links: starting from the fascial and muscular connections, up to the neurological and biomechanical ones.

Some studies shown how during the mouth opening and the biting the neck adapts with a flexion and an extension. However, other studies shown an improvement of the lateral movements of the cervical spine after osteopathic standard treatment on people with TMD (Temporo-mandibular disorders).

Aim: To verify a possible influence of the treatment of masseter muscles, on TMJ (Temporo-mandibular joint) and cervical spine mobility.

Methods: This was a randomized single-blinded controlled clinical trial.

Inclusion criteria: subjects between 20 and 50 years old who had no pain, surgery or trauma regarding neck and jaw in the last 3 months.

Exclusion criteria: subjects suffering from vertebral artery disease, vertigo and mental health issues.

Participants were divided into two groups, intervention and control.

Both groups underwent measurements for mouth opening, cervical flexion and extension. The intervention group received a treatment, and was also assessed for outcomes after the intervention.

Results: Thirty one subjects were included in the study. There has been a statistically significant increase in mouth opening over time in the treatment group ($p < 0.05$), however, changes compared to the control group were not statistically significant. For the cervical flexion and extension, despite the increase of the measurements, the differences over time and compared to the control group were statistically insignificant.

Conclusion: the treatment of the masseter muscle seems to have a positive influence on the mouth opening. Future studies should involve larger sample sizes and patients with TMD.