



Research Title:

**Can Osteopathic Manipulative Treatment change blood
saturation?**

**A pilot study between smoker and non smoker healthy
subjects.**

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Abstract

Backgrounds: This study aimed to investigate whether osteopathic manual treatments (OMT) could change blood saturation (SpO₂) in healthy subjects and if there were differences between smokers and non smokers groups. It was initially hypothesized that treatment would induce a change in blood saturation.

Methods: Five healthy smokers and five healthy non smokers received four SpO₂ measurements using a pulse oximeter: they had a SpO₂ reading at the start and pre any treatment, the second one after resting supine on the bed for five minutes (control group) and the third immediately after osteopathic assessment, thoracic soft touch and functional evaluation (sham treatment).

The final reading was performed immediately after OMT.

Results: The results did not demonstrate a statistical significant change in SpO₂ after osteopathic treatment in the healthy non smoker group.

By contrast there has been an increase in SpO₂ post OMT which was statistically significant in the smoking group.

Conclusions: This result suggests that OMT may effect SpO₂ in healthy smokers which showed lower SpO₂ values than non smokers in the studied population.

This study can suggest that OMT may be considered in some respiratory diseases where a SpO₂ decrease is present.