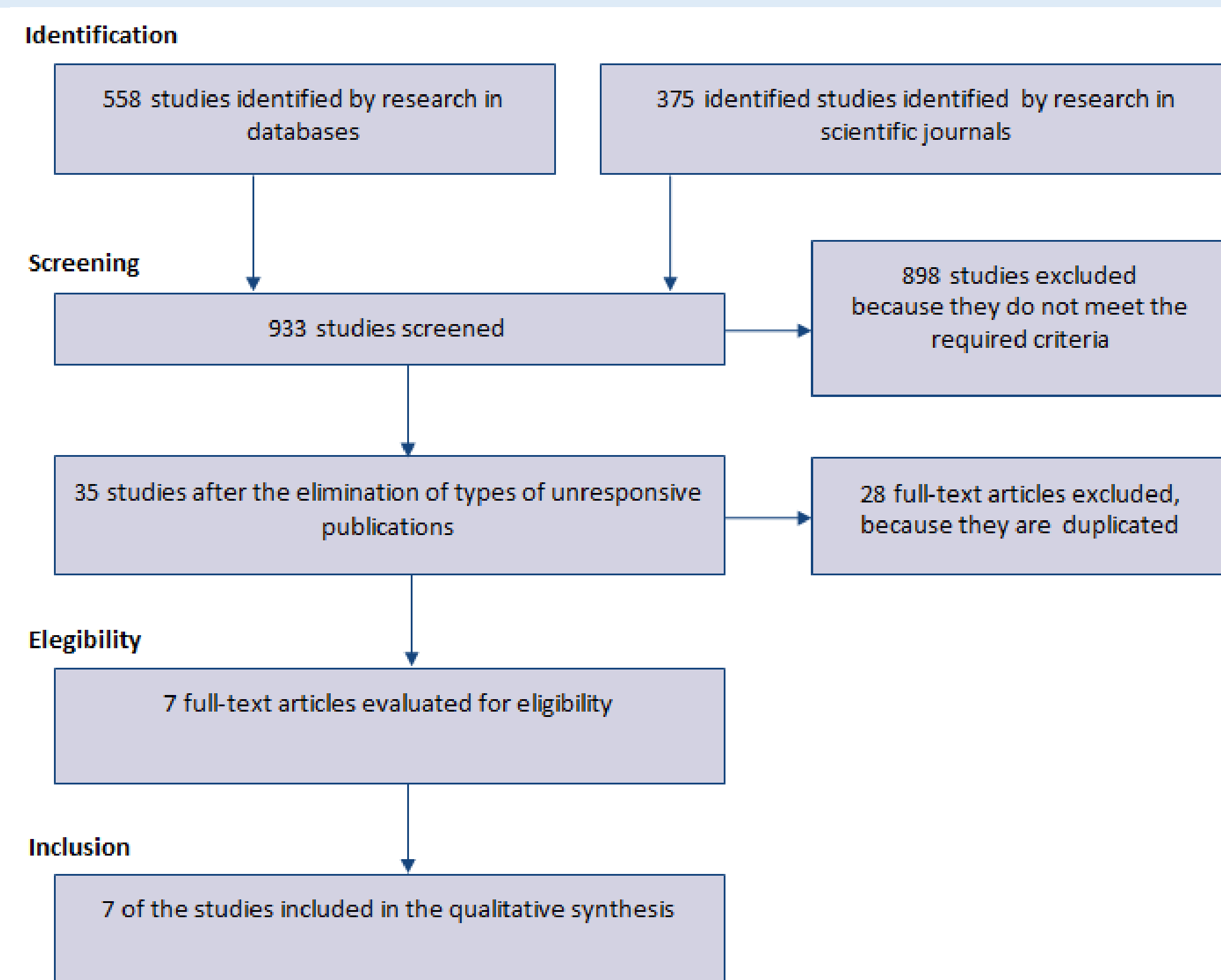


Masterthesis, Andrea Giacomo Costa, 2019  
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## Background

- Migraine is a multifactorial neurological disorder, characterized by recurrent headaches, moderate or severe, often associated with hypersensitivity to neurosensory stimuli. The management of migraine requires an integrated and personalized approach, including alternative and complementary treatments to traditional therapies, such as Osteopathic Manipulative Treatment (OMT)
- This review aims to verify if the published literature has produced significant results with respect to efficacy in the treatment of migraine as well as assessing the scientific quality of the published studies and their methodological relevance

## Materials and Method



**Research period:** December 2018 - March 2019

**Literature:** Pubmed; Cochrane Library; OstMed; Medscape / Jaoa; IJOM; Science Direct

**Direct Keywords:** Migraine; headache; osteopath \*; OMT treatment; craniosacral

**Inclusion criteria:** only OMT treatments, migraine (with aura and without), subjects of both sexes and all ages

**Exclusion criteria:** chiropractic and physiotherapy studies, traumatic migraine, animal studies

**Evaluation scales:** PEDro and STROBE

## Results

	PEDro SCALE	STROBE SCALE	CST/OMT
<b>Mann J D</b> "Craniosacral therapy for migraine: Protocol development for an exploratory controlled clinical trial." (2008)	9/11		CST
<b>Voigt K</b> "Efficacy of Osteopathic Manipulative Treatment of Female Patients with Migraine: Results of a Randomized Controlled Trial." (2011)	7/11		OMT/CST
<b>Curtis P</b> "Credibility of low-strength static magnet therapy as an attention control intervention for a randomized controlled study of craniosacral therapy for migraine headaches." (2011)	11/11		CST
<b>Cerritelli F</b> "Clinical effectiveness of osteopathic treatment in chronic migraine: 3-Armed randomized controlled trial." (2015)	11/11		OMT/CST
<b>Arnadottir T S</b> "Is craniosacral effective for migraine? Tested with HIT-6 Questionnaire." (2012)	8/11		CST
<b>Adragna V</b> "Migraine without aura and osteopathic medicine, a non-pharmacological approach to pain and quality of life: open pilot study." (2015)		12/22	OMT
<b>D'Ippolito M</b> "Effects of Osteopathic Manipulative Therapy on Pain and Mood Disorders in Patients With High-Frequency Migraine." (2017)		16/22	OMT

5 RCT (average PEDro score 9/11) and 2 observational (average STROBE score 14/22)

### Sample size:

RCT studies: 20-109 (40% over 100)

Observational studies: 8 and 11

### Randomization: 71%

### Blindness: 57 %

### Techniques used:

CST 43%; other OMT (also CST);

### Measuring instruments:

HIT-6 71%; MIDAS 43%; SF-36 43%; Headache diary 43%

### Ethical aspects 86%

### Follow up between 4 and 24 weeks

## Conclusions

- The present review found that RCT studies have shown greater methodological quality than observational studies.
- All the studies considered by the present review show that OMT can be considered a clinically effective treatment for patients with migraine and be included in a multidisciplinary program to treat the pathology. However a protocol of techniques to be followed is not yet present.
- CST therapy seems to be the most credible and effective osteopathic technique, particularly improving quality of life (HIT-6), even if more research is needed to determine if and how craniosacral therapy affects migraine, with further randomized controlled clinical trials (RCTs) and the development of a standardized CST protocol including placebo control groups and long-term follow-up

## Literature

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- Goadsby P, «Migraine pathophysiology», Headache: The Journal of head and face pain 45 (suppl.1) (2005): S14-S24
- Hall J.E «Guyton and all, textbook of medical physiology» ed Elsevier (2016)
- Sauro K.M., Rose M.S.,Becker W.J, Christie S.N., Giammarco R., Mackie G.F., Eloff A.g., Gawel M.J «HIT-6 and MIDAS as measures of headache disability in a headache referral population» Headache: The Journal of head and face pain 50, n. 3 (2010): 383-95
- Whalen J, Yao S, Leder A. «A short review of the treatment of headaches using Osteopathic Manipulative Treatment». Current pain and headaches reports 22, n. 12 (2018): 82