



Cervicogenic Headache

PIER DOCUMENT

PROBLEM:

Headaches cause nearly \$31 billion in indirect costs annually in the US.¹⁰

Within patients with headaches, a cervicogenic source can be found in 4% of the general population, 17.5% of those with severe headaches, and up to 53% of those with headache post whiplash injury.¹¹

The upper cervical (C2/C3) facet joints have been shown to be the source of 70% of cervicogenic headaches with the majority of headaches being experienced within the C1-C4 dermatomes.¹¹

Clinical diagnosis can be made with the following criteria:

- a. Pain that originates in the neck and radiates to the frontal and temporal regions
- b. Unilateral symptoms (may be bilateral but never together)
- c. Radiates to ipsilateral shoulder and arm
- d. Provocation of pain by neck movement
- e. History of neck pain

INTERVENTION:

Cervicogenic headaches are effectively treated by Physical Therapists using a multimodal approach including thrust and non-thrust mobilizations of the cervical and thoracic spine and low load endurance exercise of the upper quarter musculature.⁴

Physical Therapists' unique education and experience in manual therapy and exercise make them an ideal treatment option for patients with cervicogenic headache.

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EVIDENCE:

Evidence: Oxford Evidence Grade = A (level 1A studies)

Manual Physical Therapy & Exercise management (\$400) is 1/3 the cost of standard physical therapy (\$1,200) and primary care management (\$1,300) over the course of one year.⁷

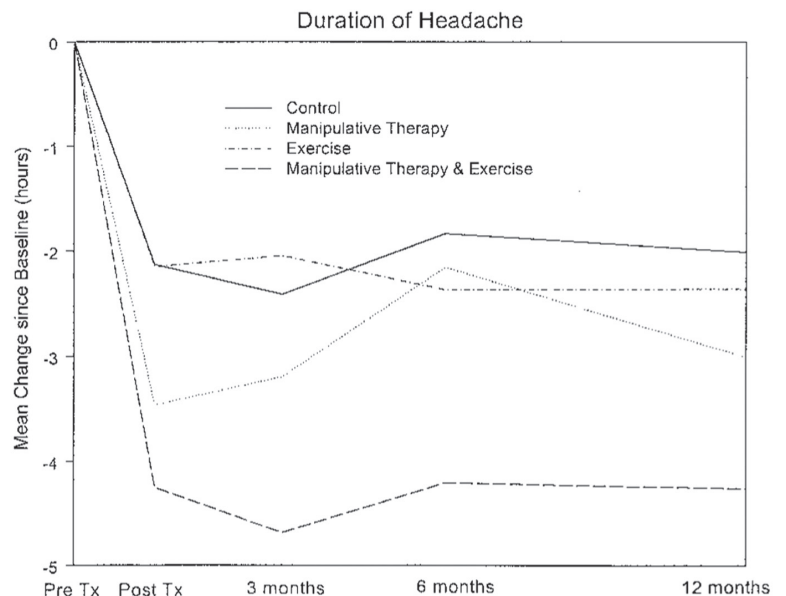
A combination of manual physical therapy and exercise is more beneficial than primary care management (PCM), medication, modalities, manual therapy, or exercise alone in patients with neck pain, with or without headache.¹⁻³

30% of patients treated with manual therapy and exercise experience a **clinically important reduction in pain** than would have occurred otherwise if patients were receiving an alternative treatment approach.^{1,2}

10% of patients treated with manual physical therapy and exercise experience a **complete reduction in headache frequency** than would have occurred if patients were receiving an alternative treatment approach.⁴

The beneficial effects of manual therapy and exercise continue to be observed at **one year**^{2, 4, 5} and at **two years** more patients remain satisfied with their care compared to alternative treatment approaches at 2 years.⁶

The **Number Needed to Treat (NNT) is 2** for patients with neck pain treated with manual physical therapy and exercise to achieve one additional successful outcome than would have occurred if patients were receiving an alternative treatment approach.²



REFER:

A critical review done by Pollmann, found that “physical therapy is recommended as the first line of management” in patients who suffer from cervicogenic headaches.

Physicians should look to refer those patients who present to their clinic with unilateral dominant side-consistent headaches associated with neck pain which are aggravated by neck postures or movement and present with joint tenderness in at least one of the upper three cervical joints.⁸

Patients who may not be appropriate for PT include those presenting with bilateral headaches, migraines, nausea and vomiting, traumatic injury/accident, or headaches with an aura.⁹

References

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