

PROBLEM:

NECK PAIN

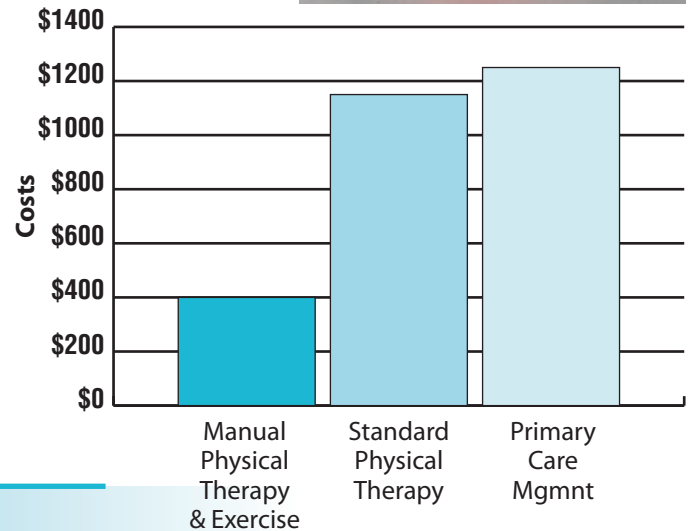
Neck pain affects 10-15% of the population at any one time, with a lifetime incidence of 22-70%.¹ Only 6% of patients with neck pain report resolution of symptoms at one year.²

A recent systematic review demonstrated the prognosis from idiopathic neck pain is poor³ and 50-75% of patients with neck pain will report symptoms at 1 and 5 year follow up.⁴

Evidence suggests the utilization of manual therapy and exercise is a more cost effective intervention compared to primary care management alone or standard physical therapy (see graph).⁵

Our effectiveness in treating patients increases as we match interventions to a patient's signs and symptoms. Evidence suggests outcomes are improved by correctly matching each intervention to a specific patient category seen below.⁶

Patients with mechanical neck pain, cervical radiculopathy, and cervicogenic headaches can benefit from Physical Therapy interventions including manual therapy and exercise to reduce pain and improve disability.



SOLUTIONS:

Exercise and Conditioning

Patients within this category may display lower pain and disability levels and report a longer duration of symptoms.

Exercises will aim to improve muscle function within the deep cervical flexors and scapular muscles.

A recent systematic review provided Level 1 evidence on the benefits of exercise for patients with mechanical neck pain.⁷

Strong evidence supports the utilization of proprioception and strengthening exercises for patients with recurrent or chronic neck pain.⁸

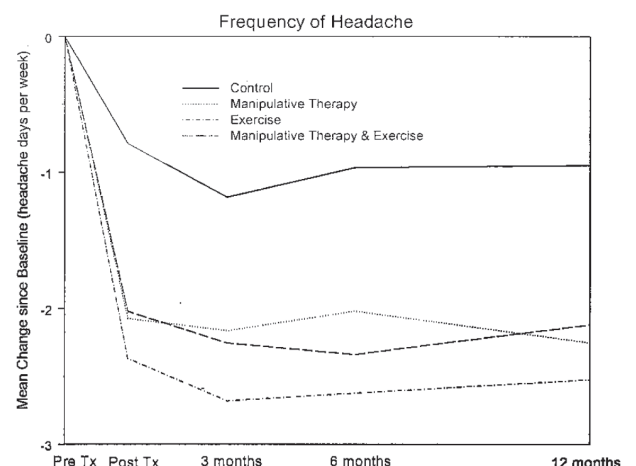


Cervicogenic Headache

A recent Cochrane review documented the improved effectiveness of manual therapy and exercise over manual therapy alone in patients with neck pain with or without headaches.¹⁰

Authors report the benefit of cervical manipulation on reducing headache intensity and frequency in patients with headache.⁹

The utilization of manual therapy and cervical strengthening has been show to reduce pain, disability, and headaches over both the short and long term (see graph).¹¹



Centralization

Patients within this category include those who have signs and symptoms of nerve root impingement or radicular symptoms.

Studies demonstrate 26% of patients with cervical radiculopathy who undergo surgery continue to experience high levels of pain at a 1-year follow-up.¹² Studies also suggest that patient outcomes may be superior with conservative management versus surgical interventions.^{13, 14}

Physical therapy interventions consisting of manual therapy¹⁷, cervical traction^{15, 16}, and cervical centralization exercises have been shown to decrease pain and improve function in this population.

Recently authors reported 91% of patients with cervical radiculopathy who underwent treatment of manual physical therapy, cervical traction and strengthening exercises showed significant functional improvement.¹⁷



Pain Control Classification

This subgroup comprises patients with acute or traumatic onset of neck pain, including whiplash injury, and those presenting with high levels of pain and disability.

Physical therapy interventions for this category aim to decrease pain and allow transition into other subgroups for treatment to reduce disability.

Evidence suggests utilization of thoracic spine manipulation¹⁸, cervical spine mobilizations¹⁹, neck active ROM exercises²⁰, gentle soft tissue massage²¹, and physical modalities such as TENS.²²

Interventions matched to patient's signs and symptoms within the category demonstrate greater changes in pain and disability than unmatched interventions.⁶

Mobility

Patients within this group include those with symptoms proximal to the elbow, an acute onset (<30 days), and are younger than 60 years old.⁶

Evidence supports the utilization of both cervical and thoracic mobilization/manipulation, with exercise, to restore mobility, decrease pain, and improve function.^{1, 22, 23}

Utilization of manual therapy can reduce long term management costs by as much as 2/3 in comparison with exercises or medical management alone.²⁴



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