

## **ABSTRACT**

**TITLE:** Post-Traumatic Neck Pain and Cervicogenic Headache in a Client with a Congenitally Anomalous Atlas and Diffuse Idiopathic Skeletal Hyperostosis

**BACKGROUND AND PURPOSE:** Post traumatic neck pain and cervicogenic headache are common reasons for referral to physical therapy. These symptoms may develop into more chronic conditions in some individuals and contribute to long term disability. Clients presenting for physical therapy may have incidental musculoskeletal anomalies which should be considered when selecting interventions. This case study describes the clinical reasoning and treatment selection for a client presenting with post traumatic neck pain, cervicogenic headache and incidental skeletal anomalies.

**CASE DESCRIPTION:** The client was a 39-year-old male presenting two months post motor vehicle accident with left sided occipital-temporal headaches, loss of cervical motion and neck pain. The patient was treated primarily with Medical Exercise Therapy and selected manual therapy techniques.

**OUTCOMES:** The client regained full cervical motion, had a 42% reduction in Neck Disability Index score and reduced his headache frequency and intensity.

**DISCUSSION:** Selection of appropriate physical therapy interventions can be accomplished by clinical reasoning and considering all factors which may influence planned treatment. Many clients may present to the clinic with undiagnosed skeletal anomalies and the physical examination should help therapists determine appropriate interventions. Muscular changes have been shown in clients with chronic neck pain and headaches. Manual therapy and therapeutic exercise have demonstrated effectiveness in reducing neck pain and cervicogenic headache. Medical Exercise Therapy in particular is safe and beneficial for clients with traumatic neck pain and cervicogenic headaches.

**Manuscript word count:** 2523