

CASE REPORT

BILATERAL FUNCTIONAL THORACIC OUTLET SYNDROME IN A COLLEGIATE FOOTBALL PLAYER

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ABSTRACT

Background. Thoracic Outlet Syndrome (TOS) involves compression of the brachial plexus, subclavius artery and vein. Many studies discuss efficacy of surgery and few discuss conservative treatment. It is unknown what specific forms of conservative treatment are best.

Objective. Describe conservative management for TOS using unique exercises.

Case Description. A collegiate football player reported numbness/tingling down his right arm after a right brachial plexus stretch injury. Seven months later, he was diagnosed with recurrent cervical traction neuropraxia. Two months later, he reported bilateral symptoms and was diagnosed with functional TOS. The athlete began shoulder strengthening (deltoid, middle trapezius, rhomboids, pectoralis major, latissimus dorsi, biceps, upper trapezius and rotator cuff) and stretching (pectoralis, scalene and upper trapezius) which failed to resolve his symptoms after four weeks. Surgical resection of bilateral first ribs and quitting football was recommended by four physicians. Unique therapeutic exercises developed by the Postural Restoration Institute™ were used to optimize respiration/posture via muscle activation and inhibition. After six weeks, the athlete was asymptomatic and returned to football but still experienced paresthesia with contact. Additional exercises were prescribed and remaining symptoms were abolished.

Outcomes. The Northwick Park Neck Pain Questionnaire was 55.5% at initial and 0% at four weeks and discharge.

Discussion. Athlete did not demonstrate relief of symptoms from shoulder stretching and strengthening. Intervention designed to optimize respiration/posture by repositioning the pelvis/trunk via specific muscle inhibition and activation resulted in abolishing the athlete's symptoms. Management that aims to optimize respiration via muscle inhibition, activation, and repositioning warrants further research.

Key words: thoracic outlet syndrome, postural restoration, respiration

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