

## Cervical Rib and Thoracic Outlet Syndrome: A Frequent Delayed Diagnosis

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### INTRODUCTION:

Thoracic outlet syndrome is often overlooked and obscures cause of shoulder pain which frequently with history of multiple visits to medical practitioner. The symptoms are dependent on compressed structure. Thus high index of suspicion and early clinical impression remains a crucial component in differentiating TOS from other conditions.

### CASE REPORT:

54 years old gentleman complained of left shoulder pain for 6 weeks that previously had seek treatment from multiple medical centre. It was a persistent pain, worsened on prolonged movement and relieved with analgesic. The pain was sharp in nature and not radiating. Associated with numbness over left hand. No upper limb weakness. No constitutional symptoms and family history of malignancy. On examination, Adson's test positive. Left upper limb revealed tenderness over left rhomboid. No muscle wasting. Neurovascular intact.

### RESULTS:

He was started on physiotherapy and analgesics. However patient not keen for further intervention. On next follow up, he claimed the pain improved and satisfied with the progress.



Figure 1: AP cervical xray showing cervical rib

### DISCUSSIONS:

Thoracic outlet syndrome is characterized by a set of symptoms induced by the compression of the brachial plexus or subclavian vessels. The causes are cervical rib, trauma, scalene muscle hypertrophy and fibrous band.

Cervical rib is a congenital anomaly that reported to be less than 1% of the population (1).

About 10% of patients with suspected TOCS have evidence during physical examination and other examination modalities. Thus TOCS is one of the most overlooked, misdiagnosed, and underrated conditions. (2)

### CONCLUSION:

Thoracic outlet syndrome due to cervical rib is a frequent delayed diagnosis. High index of suspicion is needed to come to correct diagnosis and appropriate treatment strategy.

### REFERENCES:

1. Wise R (2008). Seventh cervical rib associated with subclavian artery occlusion and multiple infarcts: case report. *J Neurosci Nurs* 40(3): 169-172.
2. Novak CB et. Al. Outcome following conservative amanegemtn of thoracic outlet syndrome. *J Hand Surg Am* 1995;20(4):542-548