

Case Report

Posterior-Only Cervical Approach in Upper Cervical Abnormalities: A Case Report

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INTRODUCTION

Role of surgery in neglected trauma case and infection at upper cervical is remain controversial. Majority of cases treated with combination of anterior approach (trans oral release) and posterior approach (posterior fusion).

HISTORY

Case I: A 17-year-old male with neck pain, quadriplegia and myelopathy during the past 6 months due to traumatic event. Bowel and bladder functions remained intact. MRI studies reveal spinal cord compression caused by cervical fracture dislocation.

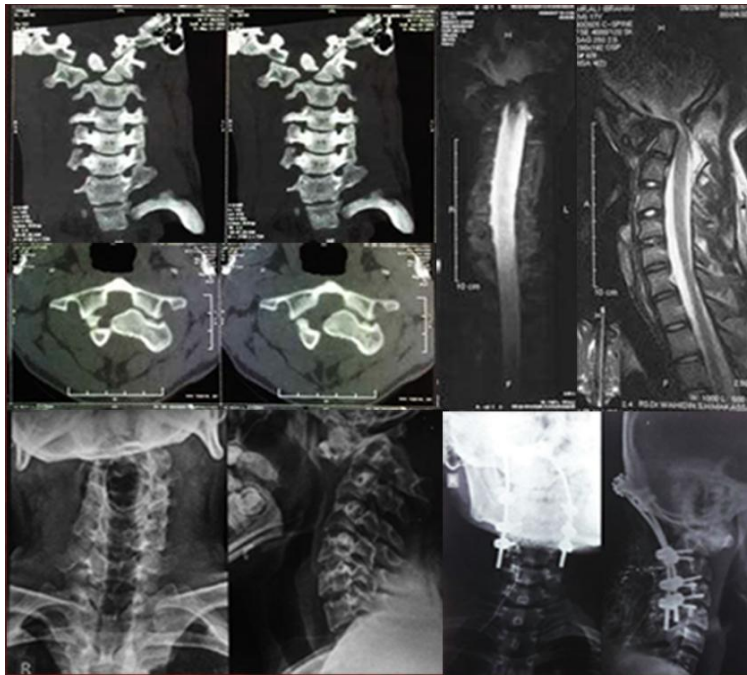


Figure 1: Case 1

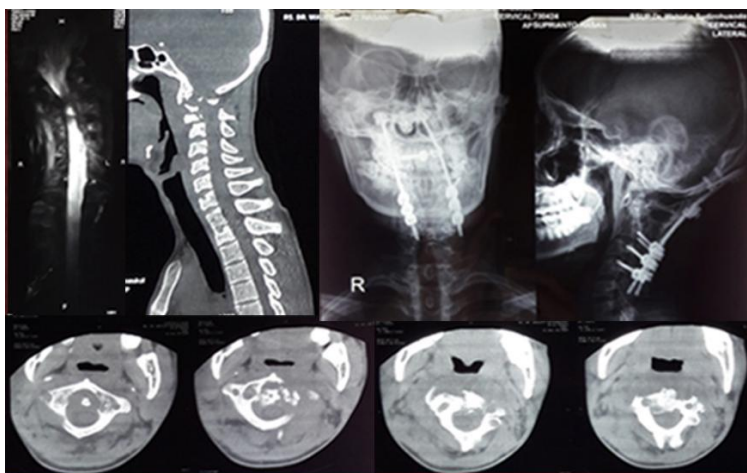


Figure 2: Case 2

Case II: A 23-year-old male with neck and radicular pain, upper extremity weakness, and insecure gait. The workup studies reveal cervical spine spondylolisthesis C2-C3, destruction at C1-C2.

Case III: A 25-year-old male with neck pain suffered past 7 months. Initially he felt like a muscle spasm at the neck, and progressively getting worsen. There is no neurological deficit. The workup studies reveal spondylitis TB as level C1-C2.

INTERESTING POINTS FOR DISCUSSION

Role of surgery in the management of cervical abnormalities is remain controversial¹. The major of cases are treated by a combination of anterior approach (transoral odontoid release) and posterior approach (posterior fusion) especially in Spondylitis TB and Neglected fracture dislocation².

SOLUTION AND RATIONALE

Posterior only cervical approach may be beneficial in the appropriate circumstances following reasons:

- (1) Reduce operation time and blood loss,
- (2) fewer anatomical

hazards, (3) easier visualization of the dural sac and nerve roots.¹



Figure 3: Case 3 FINAL OUTCOME

Posterior only cervical approach has a good result to manage either for neglected trauma or non trauma case in atlantocervical abnormalities.

REFERENCES

1. Mandavia R, Fox R, Meir A. Atlantoaxial TB with paralysis: posterior-only cervical approach with good results. *JRSM open*. 2017 May;8(6):2054270417697866.
2. Yang SY, Boniello AJ, Poorman CE, Chang AL, Wang S, Passias PG. A review of the diagnosis and treatment of atlantoaxial dislocations. *Global spine journal*. 2014 Aug;4(3):197-210.
3. Mummaneni PV, Haid RW. Atlantoaxial fixation: overview of all techniques. *Neurology India*. 2005 Oct 1;53(4):408.