

## **NONSURGICAL TREATMENT IN RARE PAEDIATRIC UPPER CERVICAL SPINAL TUBERCULOSIS**

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**Introduction:** According to WHO, tuberculosis infected one quarter of world population. Only small portion of infected individual will manifest the disease especially immunosuppressed person. About 10% of all patents with extrapulmonary tuberculosis manifestation involve the bone, and half of these patients develop infection at the spine. Spinal tuberculosis is more frequent in area where tuberculosis is endemic with majority of cases up to 90% are from African and South East Asian regions. Cervical spine tuberculosis is rare, of 3% to 5% of all spinal tuberculosis. Treatment of upper cervical tuberculosis spine is varied from antituberculosis treatment chemotherapy to surgical debridement and fusion.

**Discussion:** We describe two uncommon cases of paediatric with upper cervical tuberculosis spine. The first case is 7 years old boy disseminated tuberculosis with C1 and C2 spinal TB. He presented ill with one year history of left painful neck swelling with anterior chest swelling with pus discharge for 1 week. He had significant constitutional symptoms and associated symptoms of chesty cough and night sweats for past 1 month. The second case is a 3 years old boy with C1 and C2 spinal TB with retropharyngeal abscess presented with neck pain for 1 month. Both cases although noted to have upper cervical instability, they showed no neurological deficit. They were treated non-operatively with antituberculosis treatment, optimum nutrition and close follow up. On further follow up, both cases show improvement in symptoms, functional status and no neurology deficit.

**Conclusion:** For upper cervical spine tuberculosis infection in paediatric population, studies have given a few indications for surgery such as neurological deficit, an atlantodental interval greater than 5 mm on flexion/extension view, and progressive deformity. From our experiences, both cases even with cervical spine instability, antituberculosis treatment remain the most important therapy for cervical spine tuberculosis.