

Pathological Fracture Of C4 Vertebra Secondary To Lung Adenocarcinoma Metastasis With Concomitant Fungal Spondylitis: A Case Report

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INTRODUCTION:

Fungal infections of the spine are relatively uncommon and occur as opportunistic infections in immunocompromised patient, mostly spread via hematogenous route (2). We reported a case of pathological fracture of C4 secondary to lung adenocarcinoma with concomitant fungal spondylitis.

CASE REPORT:

A 69 years old man came with neck pain and progressive bilateral upper limb weakness for a month with constitutional symptoms. He had no history of trauma.

Clinically, tender at mid cervical region. There is muscle weakness from C5 to T1 and reduced sensation from C4 to T2 bilaterally. X-ray (Figure 1) shows osteolytic destruction of C4 vertebral body with kyphosis. MRI revealed retropulsion of C4 causing spinal cord compression and stenosis (Figure 2). CT scan showed consolidation of upper lobe of both lungs with multiple lung, pleura and mediastinal nodules and hilar lymphadenopathy.

Patient developed worsening neurology where bilateral lower limbs involved. An urgent open biopsy, corpectomy and anterior plating of C3-C5 vertebra was performed. Unfortunately, he developed quadriplegia post operatively. Tissue histopathology was reported as poorly differentiated adenocarcinoma, lung in origin. Intraoperative tissue culture grew *Candida Albicans*. Intravenous Fluconazole was given for a month followed by oral medication. He was on prolonged ventilation which later requiring tracheostomy. After three months, the patient passed away due to disease progression.

DISCUSSIONS:

Metastatic spine tumors derived from lung has rapid progression and poor prognosis as they are one of the most difficult types to treat (3). They can rapidly cause paralysis and the appropriateness of local treatment has to be judged promptly. Superimposed fungal infection to the spine is uncommon, mostly in immunocompromised patients. Treatment is by antifungal between 6 to 12 months.

CONCLUSIONS:

Spinal metastasis with concomitant spinal fungal infection was rarely reported. Treatment of spinal metastasis depends on disease prognosis. Fungal infection should be treated accordingly.



Figure 1



Figure 2

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