Rare case of pathological fracture of upper cervical spine due to pyogenic spondylodiscitis

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INTRODUCTION

Upper cervical spondylodiscitis is uncommon. Currently, there is limited literature describing this pathology.

REPORT:

We report a 54-year-old gentleman presented with severe neck pain and neurological deficit. His septic parameters was raised with blood culture grew Staphylococcus aureus. Otherwise, malignancy, autoimmune and tuberculosis workup were negative. MRI cervical spine showed C1 and C2 destruction with prevertebral, paravertebral and epidural collections causing spinal canal narrowing. CT-guided biopsy was done and histopathological examination showed no granuloma or evidence of malignancy. Conservative treatment with antibiotics and bracing was opted in view of high-level lesion.

DISCUSSION:

Cervical spine involvement with pathological fracture is rare in both infection and malignancy. For cervical pyogenic spondylodiscitis, multiple etiologies has been postulated, such as direct inoculation (from spine trauma or surgery), hematogenous seeding or contiguous spread from a paravertebral space. The onset is usually insidious which may lead to bony destruction, instability and neurological impairment. Cervical spine involvement has even high risk of worse clinical outcome due to higher level of involvement.

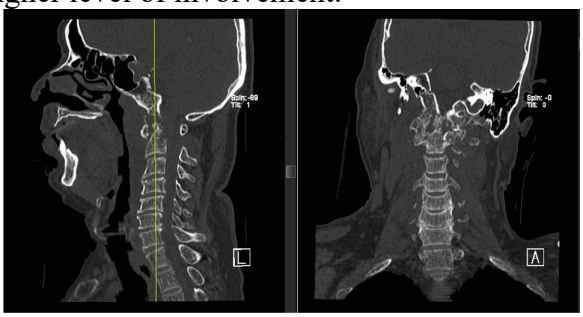

Figure 1: CT shows C1 and C2 subluxation with destructive changes

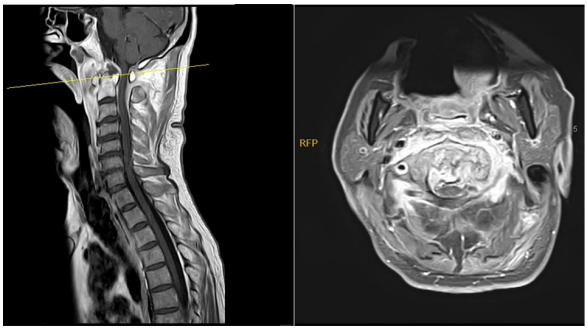

Figure 2: MRI revealed destructive lesion involving C1, C2 and left occipital condyle

CONCLUSION:

A high index of suspicion need to be maintained although it is unusual to have cervical spine involved in infection and malignancy, as it harbours a poorer neurological prognosis and higher mortality or morbidity. Thus, an early diagnosis and prompt treatment should be the goal treating this uncommon entity of spine pathology to prevent morbidity and mortality.

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