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Case Report Open Access

Spine Fracture in Ankylosing Spondylitis. About a Case

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Introduction

Ankylosing spondylitis (AS) is a chronic inflammatory rheumatic disease. The natural evolution of AS leads to a spinal fusion by the formation of bony ridges and diffuse spinal stiffness [1]. The inflammation and this diffuse stiffness exposes the spine to risks of fractures as a result of minor trauma [1].

Case

We report the case of a 44 year old man diagnosed with AS, with peripheral involvement, ten years ago. The patient suffered an accidental fall and he was attended the emergency room for neck pain without motor or sensory disorders. In the cervical spine radiographs no obvious changes are evident, so it was performed computerized tomography (CT) (Figure 1). He was diagnosed with non-displaced odontoid fracture. Prior to this event, the patient had a normal densitometry and bone metabolism analytical. During follow-up he had remained stable, without signs of neurologic involvement.

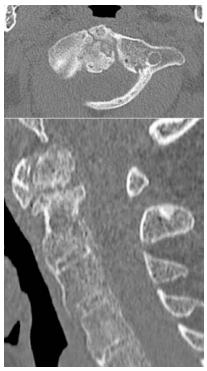

Figure 1: CERVICAL CT (axial (upper) and sagittal (lower)): fracture through body of C2 (odontoid) without displacement.

Discussion

AS increases the risk of vertebral fractures. The risk of fracture following trauma increases with the time since the diagnosis and occur more frequently in cases of AS with peripheral involvement [1]. Fractures are favoured by the loss of elasticity [2]. These fractures are cervical in 75% of the cases and they predominate at the lower levels (from C5 to C7) [1-3]. We report the case of a rare cervical fracture; C2.

Some studies have analysed vitamin D levels and bone mass in patients with AS, looking down on it, especially in early stages [4]. There has been a decrease in bone mass measured by DEXA (dual energy X) at the hip, in those patients with AS compared to controls. Thus finding no differences at the level of the lumbar spine [2]. This may be due to the existence of syndesmophytes, bridges sindesmofíticos and calcification of ligaments. Our patient had no laboratory abnormalities and DEXA was normal.

Conclusion

The risk of fractures is increased in patients with AS for different reasons. The usual imaging techniques may not be sufficient in this pathology, requiring others such as CT.

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