Management of spinal tuberculosis with extensive bony destruction of C1 vertebrae

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INTRODUCTION:

Global cases of Tuberculosis have increased. Data suggests that 25% of the world's population carries latent disease. 10% progress to active disease, of which only 1% includes infectious spread to the spine. Tuberculosis of the spine is therefore an uncommon variant of spinal infection, and debate continues regarding its optimal management. This leads to challenges regarding surgical intervention: a relative paucity of direct experience combined with conflicting reviews in the literature can lead to equipoise.

AIM/OBJECTIVES:

This report focuses on spinal tuberculosis and aims to highlight that despite the long history of Tuberculosis, Controversy still exists regarding its best treatment practice.

PATIENT/METHODS:

We present a case report of an individual with extensive destruction by tuberculosis of the C1 vertebra, a clinical episode that generated several multidisciplinary reviews and debates regarding best management which included consideration of fixation. However, treatment was tailored to cervical immobilisation and medical management.

RESULTS:

Serial CT imaging was performed and At three months there were signs of bony regrowth and clinically no ongoing neck pain. Then Halo was converted back to hard collar immobilisation and a scan at eight months demonstrated remarkable regrowth of the C1 arch and the associated occipital condyle with a full, pain-free range of motion at the occipital cervical junction.

CONCLUSION:

Early prospective case series points to the successful management of spinal tuberculosis even in the case of epidural abscesses and signs of myelopathy on examination. Conversely, Evidence that TB does not adhere to surgical metalwork (Rajasekaran et al, 2018) is one of several arguments in favour of the surgical approach.

It is the interpretation of these criteria that leads to management challenges.

Tuli's "middle path" approach of primarily medical management in the first instance with surgical intervention held in reserve is supported by this case report and even complex anatomy such as the occipital cervical junction can recover significantly

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