

Bertolotti Syndrome: A Missed Cause Of Low Back Pain In A Young Patient

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INTRODUCTION:

Bertolotti syndrome is the unilateral or bilateral enlargement of the transverse processes of the caudal most lumbar vertebra, with or without fusion to the sacrum and ilium [1].

MATERIALS & METHODS:

A 44-year-old lady was referred to us from a clinic with twenty years of low back pain which had worsened in the past year. The referring diagnosis was suspected prolapsed intervertebral disc. Further questioning revealed radicular pain to the dorsum of the left foot.

RESULTS:

Examination found no tenderness or deformity. Sensation was reduced over the left L5 dermatome. Motor power and reflexes were normal.

Radiographs showed a unilateral left lumbosacral transitional vertebra (LSTV) leading to a diagnosis of Bertolotti syndrome with left L5 radiculopathy.

The patient's pain is currently manageable with lifestyle modifications and oral analgesia.

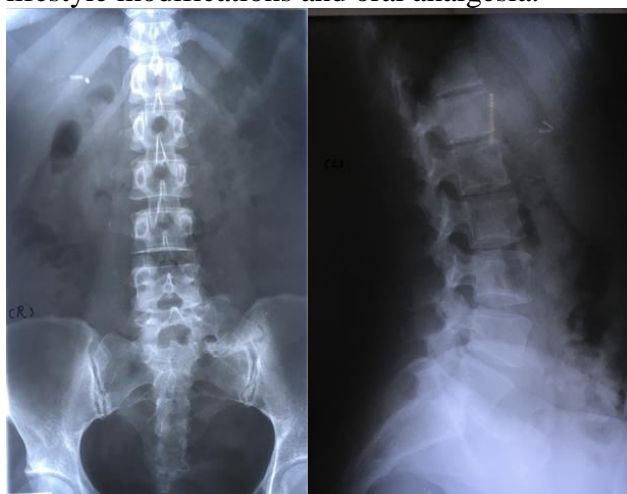


Figure 1: Left sided LSTV fusing with the ilium

DISCUSSION:

The prevalence of Bertolotti syndrome is 4 to 8% in the general population, and up to 11.4% in patients under 30 years of age [2]. Up to

35.6% of these patients experience low back pain [1]. The aetiology of the pain is likely to be multifactorial, including facet arthropathy, sacroiliitis, disc degeneration and the neoarticulation itself. Pain may also present on the contralateral side due to altered biomechanics.

Treatment options include steroid and local anaesthetic injections into the neoarticulation, resection of the neoarticulation or fusion of the affected vertebra.

Studies of the effectiveness of these modalities are sparse, with mixed long term results [1]. Therefore, there exists no standard treatment protocol.

CONCLUSION:

Bertolotti syndrome must form part of the list of differential diagnoses in investigation of low back pain in young patients.

REFERENCES:

1. Jancuska J, Spivak J, Bendo J. A Review of Symptomatic Lumbosacral Transitional Vertebrae: Bertolotti's Syndrome. *International Journal of Spine Surgery*. 2015
2. Quinlan J. Bertolotti's syndrome: A Cause of Back Pain in Young People. *Journal of Bone and Joint Surgery - British Volume*. 2006;88-B(9):1183-1186.