Successful Pseudoarthrectomy for Bertolotti’s Syndrome: A Case Report

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Introduction

- Lumbosacral transitional vertebra (LSTV) is a congenital anomaly where there is lumbarization of the first sacral segment or sacralization of the last lumbar vertebra.
- Bertolotti’s syndrome is a controversial diagnosis where a LSTV is associated with low back pain.
- In Bertolotti’s syndrome, pain can potentially arise from several different regions, including arthrosis of a pseudoarticulation formed between the transverse process and the ilium or sacrum, degeneration of the disc above, contralateral facet arthrosis, or extraforaminal stenosis.

Case Presentation

A 56-year-old man presented with progressively worsening low back and right hip pain:
- No history of any inciting event.
- Worse in the back than the hip with occasional radiation to the right groin.
- Worse with sitting, bending, and walking.
- Motor power intact and Gaenslen negative.
- Previous fluoroscopic-guided transforaminal epidural steroid injections at L5 and S1 and facet joint medial branch injections did not provide any pain relief, even temporarily.

Diagnostic Imaging

Figure 1: Preoperative radiograph

Figure 2: Fluoroscopic Imaging

Figure 3: Postoperative radiograph

Intervention

- Radiographs demonstrated a pseudoarticulation between the right transverse process and sacrum, consistent with a Castellvi Type Iib classification of LSTV (Fig. 1).
- A diagnostic intraarticular injection of the pseudoarticulation provided substantial, but temporary improvement of patient’s pain (Fig. 2).
- The next step in management was elective resection of the pseudoarticulation.
- Following resection, the patient’s pain significantly improved (Fig. 3).

Conclusion

- This case illustrates a patient with Bertolotti’s syndrome who failed conservative therapy and multiple therapeutic injections.
- A diagnostic injection into the pseudorarticulation suggested this was the pain generator.
- This case highlights the clinical utility of diagnostic injections in a case of Bertolotti’s Syndrome where pain can originate from multiple potential generators and the potential treatment with surgical resection.

References