

Pyogenic Arthritis and Paraspinal Abscess Following Facet Joint Steroid Injection -A Case Report -

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- Abstract -

Study Design: A case report and literature review.

Objectives: To discuss pyogenic infections of the facet joints and paraspinal intramuscular abscess that developed after a steroid injection into the facet joint of the lower back.

Material and Methods: A 39-year-old man who received a steroid injection to the facet joint, 3 weeks prior to admission, experienced increasing lower back pain and a high fever.

Results: Plain radiographs of the lumbar spine showed osteolytic erosion of the articular process at the L3-4 facet joint. On a CT scan, the destructed facet joint was connected to a paraspinal intramuscular abscess. MR images also showed a paraspinal intramuscular abscess on multiplane views. In the operative field, the paraspinal abscess, which extended from 2nd to 5th lumbar vertebrae, was found on the right side, with the L3-4 facet destructed and directly connected to the abscess. Some chalky material, considered to be steroid crystals, was found at the L3-4 facet joint. Drainage, debridement and irrigation were performed. Staphylococcus aureus was isolated from the culture. After surgery, intravenous antibiotics were administered, and the patients' symptoms quickly resolved.

Conclusions: A posterior facet joint injection has its own risks of developing a pyogenic infection of the facet joint. Pyogenic facet joint infections may progress to a paraspinal intramuscular abscess. Surgical drainage is mandatory in cases resistant to antibiotic treatment, with evidence of pus formation on imaging studies.

Key Words: Pyogenic facet joint infection, Paraspinal intramuscular abscess, Facet joint injection

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Magee ⁸⁾

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Fig. 1. Preoperative plain radiographs

Arrow points to the erosion of inferior articular process and narrowing of L3-4 facet joint.

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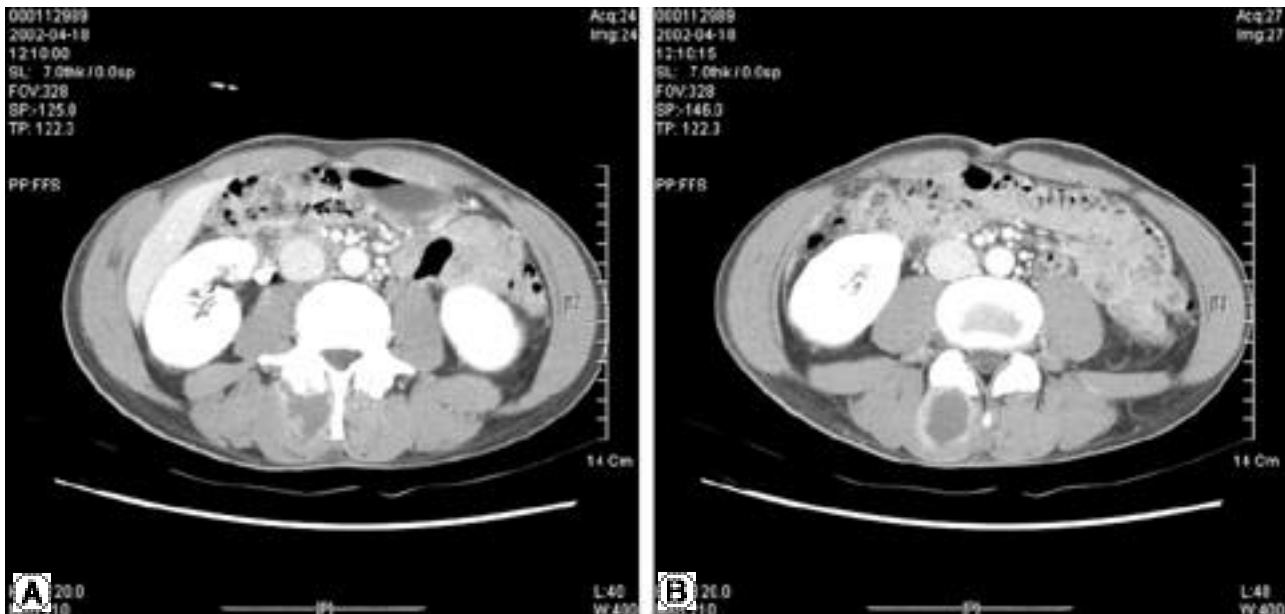


Fig. 2. CT scan after contrast enhancement
A. Right L3-4 facet joint was partially destroyed and connected to the paraspinal intramuscular abscess
B. Intramuscular paraspinal abscess at L4-5 facet joint level.

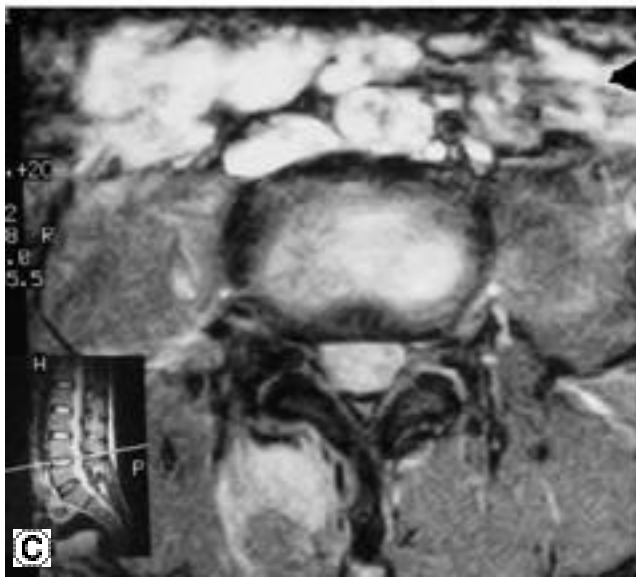


Fig. 3. MR images

- A.** Paraspinal intramuscular abscess showed high signal intensity in T2 sagittal images.
- B.** Direct connection between right L3-4 facet joint and paraspinal abscess noted.
- C.** Intramuscular paraspinal abscess at L4-5 facet joint level.

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