Reviewer's report

Title: Minimally invasive endoscopic treatment for lumbar pyogenic spondylitis: a retrospective study in a tertiary referral center

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Reviewer: Yong Ahn

Reviewer's report:

Reviewer’s comment

This is a retrospective case series on the treatment of infective spondylitis with percutaneous endoscopic debridement and irrigation (PEDI).

The authors reported 32 cases of PEDI for various lumbar spondyodiscitis with or without epidural abscess and paraspinal abscess.

The authors concluded that PEDI was effective for single-level infection. For most multi-level spondyodiscitis cases, open debridement and fusion surgeries were required. This may be useful lesson for the readers and practitioners. Otherwise, there is no new thing in this article. Furthermore, the definitive usefulness of endoscope is not clear in the author’s technique. Rather, it looks like a percutaneous debridement and irrigation technique, not endoscopic technique. Their mention about the endoscopic function is very vague and weak. The authors should clarify the roles of endoscope in detail, including corresponding pictures.

Methods

Patients

What is the method of biopsy and culture? Preoperative or intraoperative? Using a needle or working sheath? Please, describe the process to be more specific.

Intervention

The target point of insertion was the center of the disc. How did you manage the epidural abscess or paraspinal abscess part? Was it a direct exploration or an indirect irrigation? Annulus and posterior longitudinal ligament can be the barrier to the epidural space. And, it is not easy to reach the epidural space from central portion of the disc. Please, explain the way you explored the epidural and paraspinal space.

There are no descriptions about the role of the endoscope. The intervention was merely percutaneous procedure. The authors should describe the definitive role of endoscope in detail.

Results
Clinical outcomes
Twenty-six patients were successfully treated with PEDI. You better add the success rate (81.3%) in your manuscript.

Misspelled word: eevated (elevated) ESR

Discussion
Misspelled word and wrong way of expression of reference:
“… medial therapy.4” to “… medical therapy [4].”
The authors should explain the role of endoscope in detail. Your mention is not enough.
In conclusion, I think that this article is not suitable for publication at the present form. I hope your revised manuscript will be better for publication.

Thank you very much.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
This reviewer denies for all the questions about competing interests.