Reviewer's report

Title: A case of a perforated obturator hernia with a femoral abscess repaired using the pectineus muscle

Version: 3
Date: 28 March 2015
Reviewer: Takahiro Karasaki

Reviewer's report:

The authors present a relatively rare case of perforated incarcerated obturator hernia complicated with femoral abscess. Femoral abscess is a notorious complication of obturator hernia, which has been occasionally reported. The presented procedure of repair using pectineus muscle is an interesting and unique technique. The authors should describe the procedure in detail so that the readers of the manuscript can perform the maneuver in the similar case even in an emergent setting.

Major Compulsory Revisions (1-9)

1. Please describe the relationship between inguinal ligament, femoral artery, and the inguinal incision.

2. After the resection of pectineus muscle from pubis, should the muscle flap be fixed to somewhere? Since the other side of pectineus muscle is attached to femur, the resected muscle will shrink caudally, and the muscle may not sufficiently fill the abscess cavity.

3. Furthermore, because the pectineus muscle is often located next to femoral abscess in case of perforated obturator hernia, there will be a concern that the resection of the muscle may not reduce the volume of abscess cavity but rather enlarge the defect. Was the procedure really needed?

4. Can the postoperative CT be provided as additional figures? The intraoperative photograph provided in the report is not clear enough to explain the most important feature of the case report.

5. The authors did not mention the repair of hernia orifice. It is acceptable to leave the hernial orifice in case of perforated obturator hernia with poor general condition, but still, authors should state why they left the hernia untreated. Refilling of the abscess cavity with pectineus muscle is an optional treatment for femoral abscess, and it is not a treatment for obturator hernia repair.

6. Pectineus muscle helps adduction and flexion of hip joint. Did the procedure influence the patient's gait? Could the patient ambulate early after the operation? Was the procedure really worked well for the patient's recovery?

7. Why did the patient have to stay in the hospital for more than 2 months despite the uneventful recovery after the surgery?

8. The references are not accurate. In addition, the authors are only referring to
English reports published from 1974 to 1999 which have become outdated. Authors should refer to the recent articles of obturator hernia which describe the current treatment strategies and improved outcomes.

9. Authors must correct the following references.

[4] Reference is incorrect. Perhaps they were referring to the following article, although it is written in Japanese, and is not indexed in PubMed.

[6] No title of the manuscript is written.

Minor Essential Revisions (10)

10. Please check if the term “femoral” is properly used. (Page 3 lines 14,16; page 4 line 2; figure 1 legend.)

Discretionary Revisions (11,12)

11. Background and Discussion starts with a sentence describing same information. It is redundant.

12. “Computed tomography (CT)” is written twice. (Page 3 line 15, page 4 lines 14-15)

**Level of interest:** An article of limited interest

**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:**
I declare that I have no competing interests.