Peer Review File

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Reviewer A

General comments:

The authors present a very rare entity (incidence below 1%), and the combination of thoracic localization and pregnancy is even more seldom. However, despite its rarity, there are several case series on diagnostic and therapeutic management of spinal hydatid cysts that have been published over the last 15+ years. Even if this is the first reported case of a post-partum patient with a recurrent cyst – what is new about the treatment?

Thank you very much, your feedback is highly appreciated.

Mainly the attempt of removing the cyst as an emergency in post-partum situation as you mentioned adds in the rarity of the known surgical management. Which we tried to highlight in presenting this report.

Specific comments:

1. You do not address if the cyst actually did rupture during surgery. A video or screenshot of the surgeon´s view through the microscope would be very helpful.

Reply A1: The cyst did not rupture during the surgery. Unfortunately, the surgery was done in emergency bases, and we don't have a video of the procedure.

2. Do you have a postoperative MRI? Was the cyst completely removed, even from the thoracic aorta?

Reply A2: Yes, she had a post operative MRI 18 months done and it revealed no recurrence of the hydatid cyst. However, she did it at another city, and we could not get hold of them. Only we have the report from the patient after she was contacted.

3. In the description of your surgical procedure, you state "Instrumentation was performed from T3–T10, skipping T6, T7 bilaterally and the T8 right pedicle." The postoperative X-rays, however, show that the screws in T4 (left) and T8 (right) were omitted. Why?

Reply A3: There was no clinical reason for not having the screws in these two pedicles apart from the intraoperative surgeon's decision regarding the feasibility of the pedicles screw insertion. The ultimate choice was to go three levels above and three levels below with a minimal of five screws proximally and distally skipping T7 and T8 completely as their pedicles were compromised by the disease and the previous surgery.

4. How long did you administer albendazole? Based on which recommendation/Guideline?

Reply A4: She was given Albendazole for a period of 6 months, according to the CDC (Center for disease control and prevention) guidelines for the treatment of hydatid cyst.

Reviewer B

This manuscript comprises a case report of thoracic hydatid cyst with review of the literature. The uniqueness of the case is that it occurred in a recently postpartum patient and represented a recurrence.

This reviewer has concerns that the uniqueness that is described is not gone into detail. It is implied that pregnancy and postpartum may have an impact on the disease process, but this

connection is not explored. It ends up reading similar to other published case reports and lacks significant new contributions to the field.

Reply B: Thank you so much for this feedback. While we had stated in our discussion how pregnancy stress and hormonal signaling likely contributed to the growth of this cyst, we could not delve into it too much as our focus was the surgical approach to a unique situation. Had we discussed the matters of microbiology and pathophysiology, our paper would have exceeded the word limit, and frankly, would be out of scope.

Reviewer C

This manuscript reported a very rare case of s recurrent hydatid cyst in the spine and conducted the literature review. This would be helpful to consider the treatment strategy for the spinal hydatid cyst. If some descriptions are added, this manuscript would become more informative for orthopedic surgeons and obstetricians.

Thank you so much for your valuable input.

The most critical review points are:

1) In the patient's past history, a hydatid cysts were observed in not only the thoracic spine but also the visceral. The authors should specify the visceral like as the lung, liver, and other organs? And, in the present history, were there any hydatid cysts in the visceral? She received cesarean section just before the onset of paraplegia, and there were any abnormal macroscopic findings in her abdominal cavity by her obstetrician?

Reply C1: the specific viscera involvement was the superior surface of the liver. There were no visceral lesions at the present time as they were seemingly eradicated with the first treatment, and the obstetrician didn't report any abnormalities.

Changes in the text C1: Page 2, Case Presentation, fourth line

2) Three days before the sudden onset of the present paraplegia episode, she reported bilateral lower limb numbness and motor weakness through her peripartum periods. Did her obstetrician examine any imaging studies for exploring these neurological abnormalities? If not, please explain why the obstetrician did not examine any imaging studies.

Reply C2: Unfortunately, the patient had her cesarian in a private hospital a bit far away from our institute and could not tell us much information about what sort of tests they had performed.

3) As the authors described, the manuscript is worth noting that their patients' postpartum presentation is a very unique aspect of this case. Considering the time course of developing hydatid cysts after parasitic infection in general, the patient was under the state of infection through her peripartum periods. After the finding of the hydatid cysts, she was treated with anthelminthic. Descriptions about the need of anthelminthic to her neonate, and descriptions about placental permeability of parasitic insect causing hydatid cysts would be helpful for obstetricians, based on the literature review.

Reply C3: Thank you for your suggestion. We searched the literature when we were treating her to see if there was a role in treating the neonate as well. After discussions with the consulting ID specialist, and examining her infant, we found that there's no need to treat it as a basic literature search yielded no results for cross-placental transmission of the infection.