Author's response to reviews

Title: Solitary Osteochondroma of the Twelfth Rib with Intraspinal Extension and Cord Compression in Middle-Aged Patient

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Version: 3 Date: 14 February 2012

Author's response to reviews: see over
Dear Dr. S. Samuel Bederman,

Please find our revised manuscript entitled ‘Solitary osteochondroma of the twelfth rib with intraspinal extension and cord compression in a middle-aged patient (MS: 1122918221574485), which is being resubmitted for consideration for publication in BioMed Central.

Thank you for the thorough review of our manuscript. The reviewers’ comments greatly improved the quality of the manuscript. Individual reviewer’s comments have been addressed separately on a point-by-point basis along with our responses. We have also included the page and line numbers on which the corresponding revisions can be located in the text.

We hope that these revisions make the manuscript acceptable for publication in BioMed Central.

Sincerely yours,

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Responses to the comments of Reviewer 1 on MS: 1122918221574485

Comment 1: Quality of written English.

Response: The manuscript was extensively edited for improving the language.

Responses to the comments of Reviewer 2 on MS: 1122918221574485

Minor revisions

Comment 1: They need to clarify as to whether this was en bloc surgery as this could have been a chondrosarcoma as they have eluded to.

Response: Details regarding the differential diagnosis of the lesion have been added to the revised manuscript (page 4, lines 14–19).

Revised text: The differential diagnosis of this lesion included chondrosarcoma. The presence of a thin cartilage cap (thickness < 1 cm) and the absence of any adjacent soft tissue mass formation strongly implied a benign tumour. However, the possibility of malignancy, such as chondrosarcoma, could not be definitively excluded because of the age of the patient and the presence of adjacent bone erosion. Therefore, en bloc surgery was selected as the treatment of choice.

Comment 2: They need to mention in the abstract that they actually had CT follow-up for one year.

Response: The sentence regarding CT follow-up at one year was corrected in the revised manuscript (page 2, lines 15–17).

Revised text: After surgery, the patient’s symptoms improved. An additional CT scan obtained at 1 year after surgery did not show any evidence of recurrence.

Comment 3: needs some language corrections before being published
Response: The manuscript was extensively edited for improving the language.

Responses to the Editorial Comments on MS: 1122918221574485

Comments 1: My main concerns center around the description of the case. The authors make no mention of a differential diagnosis requiring a more extensive workup or concern for a primary malignancy. The authors describe their surgical resection immediately after the imaging but provide little detail on the technique of resection of the tumor. Was there an attempt at en bloc resection?

Response: Details regarding the differential diagnosis for this lesion and technique for tumour resection have been added to the revised manuscript (page 4, lines 14–25 & page 5, lines 1–11).

Revised text: The differential diagnosis of this lesion included chondrosarcoma. The presence of a thin cartilage cap (thickness < 1 cm) and the absence of any adjacent soft tissue mass formation strongly implied a benign tumour. However, the possibility of malignancy, such as chondrosarcoma, could not be definitively excluded because of the age of the patient and the presence of adjacent bone erosion. Therefore, en bloc surgery was selected as the treatment of choice.

A posterior midline skin incision was used to expose the posterior elements of T11 to L1, and the exposure was extended to both ribs. After dissection, the large outer fragment of the multilobulated osseous mass was completely exposed (Figure 4). This fragment was resected en bloc, resulting in a residual osseous mass originating from the right 12th rib and extending through the T12-L1 foramen to the spinal canal and the adjacent bony structures (i.e. vertebral pedicle and body).
For safe excision of the residual fragment, the following procedures were performed sequentially using an air drill, allowing complete excision of the residual tumour mass: hemilaminectomy of the right T12 vertebra, total facetectomy of the right T12-L1 joint, partial removal of the proximal portion of the right 12th rib, total pediculectomy and partial vertebrectomy on the right side of T12 after exposure of the tumour in the canal, transection of the L1 transverse process, and resection of the tumour below the transverse process. On the left side, transpedicular screws and a rod were inserted into the T11-L1 vertebrae under C-arm fluoroscopic guidance. Laminar decortications were performed on the left side of the T11, T12, and L1 vertebrae. After autologous iliac bone harvest was performed on the right side, autograft bone chips were placed on the decorticated laminae.

Comments 2: In the case, the authors mention that there was no evidence of recurrence at 3 months, however in the discussion they mention that there was follow-up to 1 year with a CT scan demonstrating no recurrence.

Response: The sentence regarding CT follow-up at 1 year was corrected in the revised manuscript (page 2, lines 15–17).

Revised text: After surgery, the patient’s symptoms improved. An additional CT scan obtained at 1 year after surgery did not show any evidence of recurrence.

(page 5, lines 18–21): At the 3-month follow-up examination, the weakness had completely resolved and the patient could ambulate independently. An additional
CT scan obtained at 1 year after surgery did not show any evidence of tumour recurrence (Figure 6).

Although CT did not show any recurrence at the 1-year follow-up, further clinical and radiologic follow-up is required for monitoring tumour recurrence.

Comments 3: writing abbreviations in full at the first time

Response: The abbreviations in the manuscript (e.g. CT, Gd-DTPA) have been defined at first use.

Revised text: ‘Computed Tomography (CT)’ (page 2, line 12).
‘gadolinium diethylenetriamine-pentacetate (Gd-DTPA)’ (page 7, lines 17–18).

Comments 4: Grammatical corrections

Response: The document was extensively edited for improving the language.