



北京大学第一医院
PEKING UNIVERSITY FIRST HOSPITAL

Lei Kang, MD, PhD

Associate Professor, Associate Chief Doctor
Vice Director
Department of Nuclear Medicine
Peking University First Hospital
Email: kanglei@bjmu.edu.cn

Dear Editor,

Thank you very much for your timely handling of our manuscript entitled “***Malignant giant cell tumors of the tendon sheath of the right hip: A case report***” (Case Report, ID: 78225). We appreciate all the comments from the reviewers and revised the manuscript.

Thank you again and we look forward to hearing from you.

With best regards,

Sincerely,

Lei Kang, MD, PhD

Associate Professor, Associate Chief Doctor

Vice Director

Department of Nuclear Medicine

Peking University First Hospital

Responses to Reviewers' Comments

Reviewer #1:

1. There are some sentences in the text without reference to a previous study (or studies) in order to give evidence to their statements. Without references, these statements would be mere assumptions or allegations by the authors of the manuscript. Therefore, each of the following sentences need at least one reference to back up their statement: "The site of onset is mostly in the large joints of the extremities but can also occur in the myofascia and fascia of the forearms, thighs, and low back." "MGCTTS can be divided into primary and secondary lesions, with primary lesions having the typical pattern of GCTTS at first presentation along with areas of malignant sarcoma and secondary lesions having typical GCTTS at first presentation and a malignant sarcoma component at recurrence." "The gross presentation of MGCTTS is comparable to that of a typical mesenchymal sarcoma, both presenting as grayish-yellow and grayish-red soft-textured masses with infiltrative growth, indistinct borders, and large tumor size." "Diagnostic features include prominent nuclear schwannomas (>20 per 10 HPF), enlarged tumor cell nuclei with distinct nucleoli, the presence of spindle-shaped mononuclear-like cells, coagulative necrosis, and mucinous changes, which can sometimes coexist with undifferentiated pleomorphic sarcoma or mucinous fibrous sarcoma." "However, aggressive growth does not indicate malignant transformation of the tumor, and the presence of any of these alone does not indicate malignant transformation." "CT can clearly show the details of bone changes, and MGCTTS mostly appears on CT images as a mass that grows around a joint, is large in size, has poorly defined borders, is accompanied by extensive infiltrative destruction of adjacent bone tissue, and shows obvious malignant changes." "MRI has better resolution of soft tissues than CT and can accurately show the histological features of tumors and their relationship to surrounding tissues." "MGCTTS has a mostly heterogeneous lesion signal on MRI images, with a predominantly muscle-like signal, and may show a T1WI low signal, a T2WI high signal, or (and) iron-containing heme deposits in T1WI and T2WI low-signal areas due to the presence of necrosis and cystic changes within the tumor." "CT and MRI examinations can reveal the size of the mass, internal changes such as necrosis and bleeding, and invasion of surrounding

tissues such as muscle and bone.” “(...) synovial sarcoma, which is mostly seen in young people, is more predominant in males than in females, and appears as a soft tissue mass on CT, with speckled or patchy high-density calcification visible internally; when the tumor invades bone tissue with dead bone, the longer the disease duration, the more pronounced is the tendency toward calcification, with a mixture of intralesional cystic lesions, bleeding at different times and fibrous septa, often with a typical T2WI triple signal (high, slightly high, and iso-low signal), rich blood supply to the tumor on enhancement scan, and obvious enhancement.” “In soft tissue sarcomas of the extremities, striking a careful balance between local control and functional preservation is critical.” “However, it is important to remember that systemic therapy choices for MGCTTS are currently limited.”

Response: We thank the reviewer for taking the time to assess our work and patient review. We have added the appropriate references for each of the above statements in the revised manuscript.

2. The following text in the Discussion is a mere repetition of the text presented at the case presentation, without any discussion: “This case was a primary case with 2 postoperative recurrences and a recalcitrant tendency to recur. The clinical signs of MGCTTS presented as a mass at the joint with predominant joint pain and limited motion, with some localized infection and fever. This case presented with a primary lesion in the right hip, which may be related to its large angle and range of motion, susceptibility to injury and chronic strain. The patient presented clinically with persistent dull pain in the right hip without radiating pain with limited hip motion, which progressed rapidly, with an interval of only 6 months from the onset of symptoms to the formation of a large soft tissue mass and extensive destruction of bone.”

Response: Thanks a lot for this kind suggestion. The above contents in our revised manuscript have been reformulated and the reference as follows:

This case is a primary MGCTS, occurring at the large joint, which may be related to the large angle and range of motion of the hip, susceptibility to injury and chronic strain, and grows rapidly and aggressively, with severe destruction of the surrounding bone.

3. Most of the discussion consists of a repetition of the text presented in the case report section, and a patchwork of sentences from other studies, without an actual discussion of the case presented by the authors.

Response: Thank you very much for your suggestion. We added the actual discussion of this case in our revised manuscript and removed some of the discussion consists.

Reviewer #2:

1. Do the key words reflect the focus of the manuscript? Maybe. However, a keyword could not be found in the Medical Subject Headings (MeSH) (available from <https://meshb.nlm.nih.gov>): “malignant giant cell tumor of the tendon sheath.” Changing to the appropriate term might be suitable.

Response: Thank you very much for your review. We modify the keywords to Malignant and Tenosynovial giant cell tumor.

2. The CARE checklist mentions the "strengths and limitations in your approach to this case." Therefore, please state the strengths and limitations of the approach to this case in the manuscript in the discussion section

Response: Thanks a lot for this kind suggestion. The above contents in our revised manuscript have been added.

Finally, we would like to thank the Editor and reviewers again for the constructive and detail-oriented comments, as well as your patience with our study!