

Li-Jun Cui

Science Editor, Editorial Office

Baishideng Publishing Group Inc

Subject: Submission of the Revised Manuscript: Periosteal Pseudotumor in Complex Total Knee Arthroplasty Resembling a Neoplastic Process [**Manuscript No.: 37611**]

Dear Mr. Cui,

Thank you for your email, dated January 23, 2018, regarding the first decision for our manuscript. We have carefully reviewed the comments made by the reviewer and have revised the manuscript accordingly. Our responses are given in a point-by point manner below. The answers are stated in red.

We hope the revised version is now suitable for publication and look forward to hearing from you in due course.

Sincerely,

Dr. Madhav Chowdhry, MBBS.
LA Orthopedic Institute

Response to Reviewer:

Thank you so much for the review of the manuscript and for your comments. We have answered each of the points below.

1. Typing errors should be re-checked and the reference style should be written consistently. The abbreviation should be re-checked. e.g. ref. 15. The Journal of Bone and Joint Surgery British volume or J Bone Joint Surg [Br]?

Answer: We have double-checked all the abbreviations from the journal websites and have modified each one as per their current ISO 4 Standard. All the reference styles are also consistent now. Thank you so much for pointing it out.

2. Was TKA for knee fusion performed at 56-yr-old or 62-yr-old? Inconsistence in the text.

Answer: The TKA for knee fusion was performed at the age of 62-years-old. Six years later, at the age of 68, the patient developed pseudotumor around the same TKA. We have modified and edited any confusion in the revised manuscript and have also highlighted it.

3. In Discussion section, the authors should describe the surgical technique and considerations in detail during performing segmental resection of the femur and femoral stem. How to preserve or replace the prior endoprosthesis without touching the possible malignancy? This surgical procedure should be the most important lesson for all orthopedic surgeons. Other deducing diagnostic tools can be achieved in a number of prior articles.

Answer: We have addressed the issue in great detail and have given the required insight into the surgical procedure in the discussion section. We have modified and highlighted the text in the revised manuscript for your convenience. It is as follows:

“Our surgical approach took into consideration several factors. First, assuming the lesion was neoplastic, we wanted a wide marginal excision of the lesion to provide the least amount of local and systemic contamination of tumor cells. Second, this

patient was highly satisfied with her endoprosthesis hinge TKA, so we strived to retain her knee function as best as possible. Therefore, our technique of resection was an extended arthrotomy from the knee joint line cephalad to a level just above the stem tip (measured from the end of the native femur). The procedure was performed with a pneumatic tourniquet for precise visualization.

The native femur was transected with a small sagittal saw above the stem tip. From this level and working distally to the knee joint, the intermuscular septum medially and laterally as well as the femur were elevated anteriorly from the posterior compartment along with the tumor mass via electrocautery. The hinge knee device was disconnected from the tibia and the entire segment of femur, femoral endoprosthesis construct, and tumor mass (lying upon the medial intermuscular septum) was delivered off the table for pathological examination. We were careful to avoid disrupting the tumor mass, so as not to contaminate the local joint area. To our surprise, upon cutting into the tumor, a gray pseudotumor mass was observed. This was also confirmed by microscopic frozen section review.

Our decision for a wide marginal excision, in retrospect, was overly aggressive, but we believed this decision to be the safest choice for the patient. Had we instead performed a standard arthrotomy, cut into the tumor, and found a neoplastic mass, we would have contaminated the entire knee region possibly resulting in an eventual high marginal above knee amputation or limb disarticulation. Had we instead performed a radiographic-guided needle biopsy of the lesion, the diagnosis still may have been in doubt as a “negative” tissue biopsy could be considered a false negative result. We thought through the diagnostic process carefully and the option of a wide marginal excision was selected to provide the best definitive choice for diagnosis and treatment.”