

## ANSWERING REVIEWERS

**Name of Journal:** World Journal of Radiology

**ESPS manuscript NO:** 22617

**Title:** Preoperative Embolization of Primary Bone Tumors: A Prospective Study

**Reviewer 03068027**

### COMMENTS TO AUTHORS

In fact this is an interesting study regarding the importance of preoperative embolization of primary bone tumors. The overall structure of the manuscript is complete according to the journal's requirements and also the topic falls within the scope of the journal. Furthermore, the language grading is A.

On the other hand I would like to make the following comments:

1. Considering the way the control group was recruited (retrospectively from records) this is better described as a case control study.

**Answer:** We have Modified the title accordingly from "prospective study" to "case control study".

2. The type, grade and staging of the tumor are important characteristics that affect its "bleeding potential" and type of operation. In your study you examine the effectiveness of preoperative embolization in 2 groups with at least 3 different type of tumors or tumour like lesions, unknown staging and grading and different locations. I believe that in order to extract safer conclusions the two groups should be more homogeneous: i.e ABC in extremities same grade and same type of operation. Otherwise different tumors in different sites treated with different types of operation have different potential for bleeding. Therefore in my opinion the above research should be reorganized and represented according to the comments.

**Answer:** Comparison of same type of tumor and same location between two groups was not attempted. Since in our study predominant histological pattern was giant cell tumor in both study group and control group. Rest of histological pattern were small number and were in different location hence could not be compared. However in order to extract safer conclusion we have compared the effect of TAE in case of GCT in extremities, who underwent same type of operation. Which is tabulated separately and is incorporated in revised manuscript.

**Table 2b: Intraoperative details of patients of study group and control group only for GCT of extremities**

Parameters	Study group N=18	Control group N=22	P Value
Intraoperative blood loss (ml)			< 0.0012
Minimum	250	800	
Maximum	2900	6000	

Median	1300	1800	
<b>Intraoperative blood transfusion (ml)</b>			
Minimum	0	700	<0.0007
Maximum	1400	8400	
Median	525	1400	
<b>Surgical time (min)</b>			
Minimum	115	145	> 0.0079
Maximum	340	450	
Median	210	252.5	

Reviewer's 02699853

#### COMMENTS TO AUTHORS

**1. Please, keep the introduction on to present the current state of the topic. Avoid the historical references.**

**Answer:** Historical statement was removed from the introduction.

**2. Which were exclusion criteria?**

**Answer:** EXCLUSION CRITERIA used for the study were as follows

- Where limb salvage surgery was not possible.
- Surgically unfit patients
- Coagulation disorders
- History of contrast allergy
- Patients who did not give consent

**3. Were the patients of the control group matched to those of study group only for the diagnosis? That could be an important bias in relation to the achieved results.**

**Answer:** Yes, we have matched only the histological pattern. Age group matching and location of the lesion matching was not done. In our study predominant histological pattern was giant cell tumor in both study group and control group. Rest of histological pattern were small number and were in different location hence could not be compared. However in order to extract safer conclusion we have compared the effect of TAE in case of GCT in extremities, who underwent same type of operation. Which is tabulated separately and is incorporated in revised manuscript.

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**4. There was any difference between the results of patients with a > 75% reduction of tumor blush and those with a reduction 50-75%?**

**Answer:** In our study, statistical analysis between the amount of blood loss and amount of devascularisation could not be done since majority of our patients (n=24) had >75% devascularisation and the other group which had 50-75% devascularisation was very small (n=2). However, we did not find any significant difference during the surgery.

**5. There was any difference between the result of patients embolized using the combination gelfoam-PVA and those embolized using PVA only?**

**Answer:** We applied the Wilcoxon rank-sum Mann-Whitney test to compare the various perioperative findings in the PVA only and PVA with gelfoam group. There was statistically significant difference (P value < 0.005) when only PVA was used as embolizing material as there was lesser intraoperative blood loss, lesser intraoperative and post operative blood transfusion volume.

**6. Please, add a table comparing your results with those of other authors from the reports of the literature.**

**Answer:** Added new table comparing our results with literature reports as Table 4

**Reviewer's 02695138**

# COMMENTS TO AUTHORS

**1. In Table 1 in Control group Number and percentage are missing**

**Answer:** Number and percentage in both study group and control are added in TABLE 1.

**2. Title should be more descriptive.**

**Answer:** Title has been changed to "Case control study" instead of Prospective study.