Reviewer's report

Title: Long-Term Functional Outcome and Quality of Life following Rotationplasty for Treatment of Malignant Bone Tumors

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Reviewer: Dimosthenis Andreou

Reviewer's report:

Major compulsory revision:
- The article still has several grammatical and syntactical errors
  (e.g. line 46: "Vitality was 75.0 ± 12.8, social functioning, social functioning
turned out to be 98.9 ± 3.6,"

lines 65-67: "In comparing treatment with endoprosthesis to major amputation or
arthrodesis walking efficiency defined by energy consumption and
musculoskeletal tumor society score (MSTS) are significantly better"

lines 75-76: "The main hypothesis of this study was, that patients with
rotationplasty show similar results in physical and psychical health according to
the SF36v2 (The Short Form (36) Health Survey) than a representative German
sample" etc.)

and needs to be extensively edited by a native speaker.

- Lines 117-122: Unnecesarily repeated informations: "Twelve of these 23
  patients were enrolled in the study. Nine patients could not be included as they
  were dead of diseasevat the time the study was performed. Two patients were
  lost for follow-up. There were 7 males, 5 females with a median age at treatment
  of 19 ± 10 years of age and a median age of 33 ± 11 years of age at the time of
  follow up. Two of the remaining eleven patients, were lost to follow up (8.7%) and
  nine patients died due the disease (39.1%)."

- Table 1: It is not reasonable to state percentages when the study included well
undet 100 patients - 12 in this case, as noted in the first comments to the
authors.

- Lines 141-142 read: "The results for the psychosocial outcome as measured by
the SFv2-36 are also reported in Error! Reference source not found." This
obviously needs to be corrected.

- Line 144-145: "The mean age in our series was 33 ±11 years and in the
representative German sample it was 48,9 ± 18,1 years of age." Decimals should
be given with ".", not ",".

- Line 145: "There were five female (41.7%) and six male persons (58.3%) in our
series*. What about the 12th study participant?

- Lines 155-156 read: ""±0.43, median 3, range 3-4) and gait 2.58 (SD ±0.95,
  median 3, range 0-4) (Error! Reference source not found.)."
- Lines 185-187: "Nevertheless, initiation of social and intimate contact, body image and sexuality are negatively affected in more than one third of patients with rotationplasty..." Does this sentence reflect the results of the authors or the conclusions of other studies? Have the authors examined these aspects in their patients? If not, why not?

- Lines 198-203: It would be helpful, if the authors chose to state either percentage scores or the absolute MSTS scores throughout their manuscript, rather than alternately using both.

- Discussion: Should be edited to allow the reader to draw clear conclusions.

- Conclusions: The authors state that "rotationplasty remains a viable treatment option and salvage procedure in revision cases after tumor prosthesis for patients with malignant bone tumors of the femur." This cannot be a conclusion of this study, as no patient described had a rotationsplasty as a salvage procedure.

- The reference list also needs to be edited, as the references are not presented in a homogeneous way.

- Table 1: What do the authors mean with "Borggreve Rotationplasty 10 (83.3%) Winkelmann Rotationplasty 2 (16.7%)" under treatment?

Dictionary revisions:
- Results: Did the synovial sarcoma patient underwent chemo- or radiation treatment?
- Line 162: "Flexion and Extension was normal" - of the neo-knee?

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests