Reviewer's report

Title: Nodular osteochondrogenic activity in soft tissue surrounding osteoma in Neurologic Para Osteo-Arthropathy: Morphological and immunohistochemical study.

Version: 1 Date: 9 February 2004

Reviewer: SS Stevens

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Typos/Grammatical Suggestions
1. Introduction, paragraph 2, sentence 3: Change "In despite of" to "Despite" or "In spite of"
2. Introduction, paragraph 4, sentence 2: "soft tissues could show some", delete "up"
3. Introduction, paragraph 4, sentence 3: Delete "Then,"
4. Methods, Ultrasound Examination: Recommend inserting US, such as Ultrasound (US)Examination at section header (first occurrence) so the reader understands the US is an abbreviation.
5. Results, paragraph 1: Figure labeling should be consistent with images page. Change line 7 to Fig 2a, change line 10 to Fig 2b, change line 11 to Fig 2b inset, change paragraph 2 to Fig 2c. Make similar changes in Figures Legends section.
6. Results, paragraph 4: Change envelop to envelope
7. Results, paragraph 8: Change "envelop" to "envelope"
8. Results, Serial Sections, paragraph 3: "in the cells surrounding -the- cartilage zone" insert the 
9. Results, Serial Sections, paragraph 4: "osteoblasts lining the osteoid" osteoblasts mispelled. "Some clusters of rounded cells -also- expressed VEGF in the fibrous" Reword suggestion.
10. Discussion, paragraph 2, sentence 4: "mesenchymal cells pass sequentially", not passes.
11. Discussion, paragraph 2, sentence 6: "our specimens showed the same", delete "up"
12. Discussion, paragraph 5, sentence 1: Reword suggestion: "periphery of a muscle -in which- some myofibers undergo degeneration, and -that osteoma involves- the muscles"
13. Discussion, paragraph 5, sentence 3: "in favour of -an- intramuscular"
14. Discussion, paragraph 9, sentence 7: change "joint" to "join"
15. Discussion, paragraph 10, sentence 2: change "neither" to "nor"
16. Reference list: 40. January mispelled

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Discretionary Revisions (which the author can choose to ignore)
1. Results, Serial Sections, sentence 1: "We performed serial cryosectioning of some samples."
   Please specify which samples and why they are appropriate as a representative sample.
2. Discussion, Paragraph 1: I think this paragraph does a good job of setting up the entire paper. I would like to see it more up front, perhaps in the Introduction.
3. Discussion, Paragraph 2: "Islands of woven bone, and mature lamellar bone were a constant
finding in most of specimens (23/28).” What about the other 5? This paper does not contain any quantitative data or statistics, so I feel a discussion of the less common results may also be of interest.

4. A discussion of the lack of mechanical load in neurologically deficient patients relating to osteoma formation would add a nice balance to the article. There is a small discussion that hypoxia/high hydrostatic stress may be the initial events, but there is not further discussion of the possible mechanobiological influences that are typically involved in endochondral ossification. Specifically that the presence of hydrostatic forces preserves cartilage and that the presence of shear stresses promotes endochondral ossification. The mechanical influence could indeed shed light on the finding that osteomas only occur near joints. I agree with the authors' questions for further study including the finding that osteomas rarely resorb (as might be expected in the absence of mechanical stresses) and that the size limitation or freezing also merits further investigation.

What next?: Accept after discretionary revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

none