Reviewer’s report

Title: Unusual pathological fracture of the clavicle revealing primary hyperparathyroidism: a case report

Version: 0 Date: 30 Jul 2017

Reviewer: Saket Kant

Reviewer's report:

1. Do you believe the case report is authentic?
   Yes

2. Do you have any ethical concerns? Please consider if local Institutional Review Board approval or ethical approval was obtained (if appropriate) and if the patient (or their parent or guardian in the case of children under 18) gave written, informed consent to publish this case and any accompanying images. A statement to this effect should appear in the manuscript.
   Comments: None

3. Does the Introduction explain the relevance of the case to the medical literature?
   No

4. Does the article report the following information? Where information is missing, please specify.
   a. The relevant patient information, including:
      - De-identified demographic information (age, gender, ethnicity) Yes
      - Main symptoms of the patient Yes
      - Medical, family and psychosocial history Yes
      - Relevant past interventions and their outcomes Yes
   b. The relevant physical examination findings Yes
c. Important dates and times in this case (if appropriate, organized as a timeline via a figure or table); if specific dates could lead to patient identification, consider including time relevant to initial presentation, i.e. initial presentation at $T = 0$, follow up at $T = 1$ month. Yes

d. Diagnostic assessments, including:
   - Diagnostic methods Yes
   - Challenges (e.g., financial, language/cultural) No
   - Reasoning and prognostic characteristics (e.g., staging), where applicable Yes

e. Types and mechanism of intervention Yes

f. A summary of the clinical course of all follow-up visits Yes

Comments:

5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?
   Comments: No

6. Is the anonymity of the patient protected? Please consider any identifying information in images such as facial features or nametags, whether the patient is named etc. If not, please detail below.
   Yes

7. Is the Abstract representative of the case presented?
   Comments: Yes
8. Does the case represent a useful contribution to the medical literature?

Comments: No

9. Additional comments for the author(s)?

While the case report looks interesting the excessive focus on bone scintigraphy is not acceptable. Hypercalcemia, hypophosphatemia, a very high iPTH, and localization of the parathyroid adenoma on ultrasonography as also parathyroid scintigraphy made the diagnosis.

I was a little bit confused about whether this is a clinical case report or a radiological one as the authors went on to explain extensive details of bone scintigraphy and then parathyroid scintigraphy rather than simple investigations which can easily clinch the diagnosis. The message finally looked like that bone scintigraphy is the investigation of choice for primary hyperparathyroidism which is not right.

**Level of interest**

Please indicate how interesting you found the manuscript:

An article of limited interest

**Quality of written English**

Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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