

Responses to the Editor's and Reviewers' Comments

We appreciate very much the editor and the reviewers for the constructive comments. We also thank the editor and the reviewers for the effort and time put into the review of the manuscript. Each comment has been carefully considered point by point and responded. Responses to the reviewers and changes in the revised manuscript are as follows.

Name of journal: World Journal of Orthopedics

Manuscript NO.: 45889

Column: Case Report

Title: Bilateral Sequential Femoral Neck stress fractures in Young adult with HIV infection on Anti-retroviral therapy: Case report and review of literature

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Reviewer code: 02444715, 02444795, and 02699758

First decision: 2019-03-18

Science editor: Jin-Lei Wang

COMMENTS FROM REFEREE #1: SPECIFIC COMMENTS TO AUTHORS

Please improve the grammar. For example in the case report section this needs tightening up-History revealed poor ART compliance. Upon enquiry about delay of three months in seeking treatment, patient alleged stigma related refusal of treatment elsewhere, due to his sero-positive status. He did not have any medical co-morbidity. Displaced fracture neck of left femur with characteristic opening out on the tension side, varus settling of distal fragment and established non union was noted on the radiographs (Fig 1). There are also sentences where words such as 'the' are missing. Otherwise an interesting and informative case report.

Response: We appreciate your comments very much. We have implemented your recommendations and grammar has been improved.

COMMENTS FROM REFEREE #2: SPECIFIC COMMENTS TO AUTHORS

the paper : Bilateral Sequential Femoral Neck stress fractures in Young adult with HIV infection on Anti-retroviral therapy: Case report and review of literature present an interesting case, but with very limited data. 1) The authors did not put clear X rays Bone scan or CT scan would be helpful. 2) The first fracture is associated with history of traffic accident, What is the prove that the other side was not a missed fracture or something not related to HIV

Response: We appreciate your comments very much. 1) Regret the quality of the x ray, higher quality X-rays have been provided. CT and MRI scan facilities were not done due to local inaccessibility and patient's financial constraints. 2) His physical examination at the time of first presentation ruled out any pathology on the right hip. Based on clinical presentation, physical examination and laboratory work up most alternative causes of missed fracture or secondary osteoporosis were excluded.

COMMENTS FROM REFEREE #3: SPECIFIC COMMENTS TO AUTHORS

1. The authors described that BMD data were not available unfortunately, only Singh index of the hip was available for diagnosis of osteoporosis. How about the spinal X-ray films? Were there any vertebral fractures? Or are there any metabolic bone markers or vitamin D levels available? Also malnutrition results in osteoporosis. Please indicate the patient's BW and height. 2. Fracture line of the hip or displacement of the femoral head on the X-lays are not clear, especially right side of the hip on Fig.3. Are CT or MRI available to validate the fracture? 3. Displaced hip fracture in such a young case is very difficult and challenging. I would like to know the detail of the operation for left side hip fracture. Is osteotomy is common operative procedure in the young displaced hip fracture? 4. Did the patient start to take anti-osteoporosis therapy? 5. Discussion is very well written.

Response: We appreciate your comments very much.

1. There was no evidence of wedge compression fractures in the LS spine x rays (attached). 25(OH)Vitamin D level was 24.6 ng/ml. Serum Alkaline phosphatase was 113 IU/L. Patient's weight was 74.6 Kg (BMI 26.4 kg/m²)
2. Regret the quality of the x ray. CT and MRI scan facilities were not done due to local inaccessibility and patient's financial constraints
3. Pauwel's Valgus Osteotomy is described as the choice of treatment in young patient with non-union of the femoral neck with viable femoral head. The Osteotomy aims to convert the shearing forces across the vertically oriented fracture site to compression forces across a more horizontally aligned fracture. Abductor attachment to the greater trochanter also acts as a vascular pedicle graft and assist in fracture union. Description of the surgery now included in the revised version of manuscript.
4. Dietary and pharmaceutical Calcium and Calcitriol granules were initiated. Bisphosphonate was delayed as they are contraindicated in view of Osteotomy and fracture.