

## Corticosteroid-induced Spontaneous Insufficiency Fracture

<sup>1</sup> Gan KK; <sup>1</sup> Lee SA; <sup>1</sup> Wong WK; <sup>1</sup> Loong YS

<sup>1</sup> Orthopaedic department, Hospital Ampang.

### INTRODUCTION:

Spontaneous insufficiency fractures are a type of stress fracture which are caused by normal or physiological stress on weakened bone. It commonly caused by long term bisphosphonate intake, however it can also be caused by chronic steroid intake<sup>1</sup>.

We report a case of a spontaneous insufficiency fracture secondary to long-term corticosteroid usage without any consumption of bisphosphonates.

### REPORT:

A 61-years-old Chinese lady, who is an active smoker with alcoholic tendencies, has been getting prednisolone over the counter herself for the past 20 years for claiming she has SLE and defaulted medical follow up. She complains of intermittent left thigh pain for the past 3 months. She presented to us with worsening pain for 1 day. There was no trauma or fall prior to the onset of symptoms. She denied any fever or constitutional symptoms. There were no signs of malignancy and she had no prior consumption of any form of bisphosphonates.

Radiographs demonstrated an oblique fracture without comminution at the subtrochanteric region with no adjacent radiolucencies (Figure 1).

A CT TAP was done to rule out malignancies. There was no lytic or permeative lesions within the underlying femur and there was an absence of any periosteal reaction.

The patient eventually underwent fixation with a long proximal femoral nail (Figure 2) and is on the mend. Bone sample sent showed no malignant cells.



Figure 1. X-ray of patient's left hip



Figure 2. Post operation Long PFN check X-ray patient left hip. (A) AP view. (B) Oblique view.

### CONCLUSION:

It seems that there might be a possibility of prolonged corticosteroid usage inducing spontaneous insufficiency fracture and this should not be neglected. All medical personnel and pharmacists should be aware of this when prescribing for long term corticosteroid therapy.

### REFERENCES:

1. Brennan, M et al. (2019). Spontaneous Insufficiency Fractures. The journal of nutrition, health & aging.