Non-traumatic fracture as a sign of malignancy? – a case report

¹Ishak, Nursyamimi; ¹S Hajera; ¹Ihsanulhadi, Hidayah ¹Department of Orthopedic, Hospital Sultanah Maliha, Langkawi, Kedah.

INTRODUCTION

Isolated lesser trochanter fracture is a rare case accounting less than 1% of all hip injuries in orthopedic¹ and uncommonly to be fractured without high impact trauma, owing to its anatomical location. Many available cases reported it as a first manifestation of malignancy².

REPORT:

A 56-year-old gentleman presented with a sudden onset of swelling over proximal right thigh and pain for the past three weeks. Upon visit, he ambulates with a limping gait. He denied history of trauma or fall. Initial plain radiograph showed displaced fracture of lesser trochanter of right femur. We proceeded with plain CT scan revealing an isodense soft tissue mass with destructed medial cortex. Incisional biopsy suggests a metastatic carcinoma. CECT thorax, abdomen and pelvis revealed a primary lung carcinoma with multiple necrotic mediastinal and mesenteric lymphadenopathies. He was referred to oncology team for further treatment.

Figure 1: x-ray right femur



Figure 2: CT right femur



DISCUSSION:

Isolated lesser trochanter fracture in adult may be the first manifestation of malignancy. Identifying underlying primary tumor is required for further treatment $plan^1$ and punch biopsy is recommended². Conservative management is recommended however, open reduction and internal fixation may be necessary in unstable fracture or fracture extension to femoral shaft².

CONCLUSION:

Isolated lesser trochanter fracture is a rare occurrence, a high degree of suspicion of malignancy should be kept in mind in order to give best treatment option.

REFERENCES:

- 1. Hwang SC et. al, Isolated Avulsion Fracture of the Lesser Trochanter in Adults 2020, Pg 3519-3523
- 2. Christian H et. al, Fracture of the lesser trochanter as a sign of undiagnosed tumor disease in adults 2015, Pg 1-5