

## Case Report

### Isolated Lesser Trochanteric Fracture- A Rare But Possible Clinical Entity In Adults

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#### Abstract

Isolated Trochanteric Fracture is a rare clinical entity in adults especially when it occurs due to trauma. Isolated traumatic fracture of lesser trochanter has been reported very rarely in the literature, as usually in adults, it is associated with malignancy which should be ruled out during the diagnosis.

#### Key Words

Trauma, Fracture, Elderly, Entity, Consensus, Crutches, Strenuous, Immobility

#### Introduction

Isolated fracture of lesser trochanter caused by trauma is a rare clinical entity found in elderly people. After a thorough literature review, very few traumatic isolated lesser trochanteric fractures have been reported. In this report, we have presented a case of an elderly lady who sustained an isolated traumatic fracture of lesser trochanter after a fall on the ground about 3 years back. The purpose of reporting this case was to aware the physicians about the possibility of an isolated lesser trochanteric fracture, which although being a rare entity, can present in adults.

#### Case Report

62 years old female presented to the Emergency department with chief complain of fever with chills for 2 days with altered level of consciousness. On careful history and examination, she had a right sided body weakness with slurring of speech and burning micturition and pain in the right hip and lumbar region. She was a known case of diabetes mellitus type 2, hypertension and stroke. Relevant investigations were carried out and she was diagnosed with Viral Fever with urinary tract infection which was treated accordingly and was discharged and asked for follow-up visit. In the next visit, her complaints had subsided except the pain in the hip and lumbar region. After taking a detailed history, she admitted to have had a fall on the floor around 3 years back which was not properly investigated and pain killers were advised by a local physician. But the pain recurred which was continuous in nature and restricted her daily activities. X-ray of hip region in AP view was done and a small lesser trochanter fracture was diagnosed as shown in figure 1 and 2. CT scan of chest, abdomen and pelvis was also done to rule out any metastatic disease and all the imaging was normal, it

might be caused due to the forceful contraction of iliopsoas muscle during her fall on the ground. Isolated lesser trochanter fractures are very rare in adults and there is no consensus on how to best treat them. The patient was given the conservative treatment including bed rest, pain medications and use of crutches and was advised for follow-up visits.

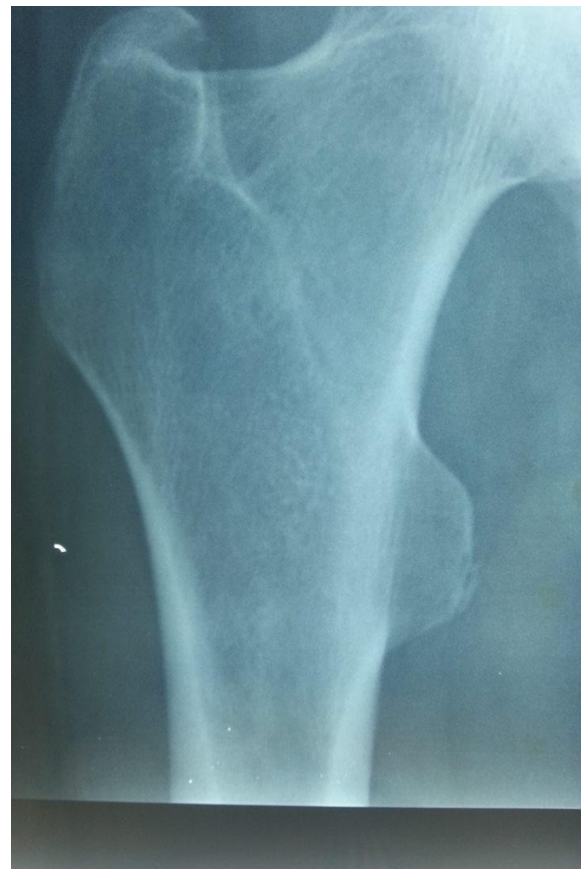
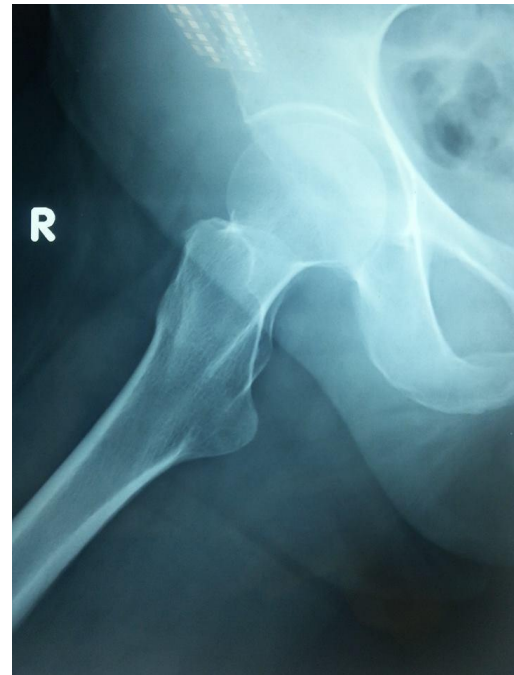


Figure 1

**Figure 2**



**Figure 3**



### Discussion

Isolated lesser trochanter fractures are a rare presentation of hip fractures in the elderly but it is very common in adolescent athletes. Classically, lesser trochanter fractures in adults are associated with tumors and result from little or no trauma.(Bonshahi, 2004) Isolated lesser trochanteric fractures have 2 typical causes, the much more common cause is strenuous flexion of the hip in a patient with open lesser trochanteric apophysis and other cause is the rare pathological fracture.(Heiney,2009) Isolated fracture caused by direct trauma is rare because of the anatomical location, superiorly by the head and the neck of the femur, laterally by the femur itself, and medially by the ilio- and ischio-public branches of the pelvis. Trauma is usually indirect, caused by sudden traction by the iliopsoas muscle on the femoral tendinous insertion.(Giacomini,2001) However, a thorough search for occult metastatic malignant disease should be made whenever this fracture occurs in an adult.(Bertin,1984) Standard therapy is non-surgical with bed rest and immobilization. However, when it is secondary to metastatic disease than it should be surgically treated with prophylactic internal fixation of hip to prevent the commonly associated subtrochanteric pathological fractures.(Phillips, 1988)

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