

Case study

Case report on intertrochanteric fracture femur left side.

Abstract

Fractures of the femur are a common injury among the elderly. Understanding the pathogenesis as well as the appropriate treatment options can help to reduce the risk of mortality and morbidity associated with this condition injury. This activity focuses on the diagnosis and treatment of intertrochanteric femur fractures, emphasizing the importance of the In evaluating and treating people with this condition, an interprofessional team is used.¹

Clinical findings- Pain in leg, swelling over the leg.

Diagnosis evaluation: Hb-11.3gm%, total WBC count- 1011/ cu.mm, total RBC count- 5.44 million/cu.mm,RDW- 14%,HCT-35.4%, Granulocytes-60%, Monocytes- 0.2%, Lymphocytes- 36%, Basophils- 00%, Eosinophils- 0.2%, total platelet count - 3.16 lacs/cu.mm.

Therapeutic intervention: Inj.voveron- two time in a day. Tab.paracetamol- two time in a day.Tab.pantaprazole- two times in a day.Inj.tramdole- two times in a day.

Outcome- After treatment, the patient show improvement. His pain is reduced.

Conclusion: My patient age is 40 year old male. They are suffering from intertrochanteric fracture femur left side with same complaint. He is admitted in 8 -11-21.

Keywords: Closed fracture reduction; femoral intertrochanteric fractures; Fracture fixation, intramedullary.

Introduction: An intertrochanteric fracture, often known as a shattered hip, is a form of hip fracture. The femur, or "thigh bone," and the pelvis, or "socket," are the two bones that make up the hip. The hip is a ball-and-socket joint that allows you to walk by moving your leg. In the elderly, intertrochanteric femur fractures are a common injury. Understanding the pathogenesis of this damage, as well as the appropriate treatment optns, can help to reduce the risk of death

and morbidity. This activity examines the diagnosis and treatment of intertrochanteric femur fractures, emphasizing the need of the interprofessional team in assessing and treating these patients². Extracapsular fractures of the proximal femur that occur between the greater and lesser trochanters are known as intertrochanteric fractures. The intertrochanteric component of the femur is made up of thick trabecular bone and is positioned between the greater and lesser trochanters. The gluteus medius, gluteus minimus, obturator internus, piriformis, and vastus lateralis all insert at the greater trochanter, which also acts as the origin of the vastus lateralis. The iliacus and psoas major, collectively known as the iliopsoas, insertion point for the lesser trochanter. The calcar femorale is a vertical wall of thick bone that runs from the femur shaft's posteromedial aspect to the post.³ A hip fracture occurs when the upper section of the femur breaks (thigh bone). Pain around the hip, especially when moving, and leg shortening are possible symptoms. Typically, the person is unable to walk. They are most commonly caused by a fall. Osteoporosis, taking a lot of drugs, drinking alcohol, and having metastatic cancer are all risk factors. X-rays are commonly used to make a diagnosis. To make the diagnosis, you may need to use magnetic resonance imaging, a CT scan, or a bone scan. Opioids or a nerve block may be used to treat pain. Surgery is usually advised within two days if the patient's condition allows it. A total hip replacement or the use of screws to stabilize the fracture is two surgical options. Following surgery, treatment to avoid blood clots is advised. About 15% of women will break their hip at some point in their lives; women are more likely than men to be afflicted.⁴ Hip fractures grow increasingly common as people get older. In elderly adults, the chance of death in the year following a fracture is over 20%. An elderly patient who has suffered a low-energy fall and now has groin pain and is unable to bear weight is the classic clinical presentation of a hip fracture. The supracondylar knee may be the source of pain. When compared to the unaffected leg, the affected extremity is frequently shortened and externally rotated in an unnatural manner.⁵

Case Presentation

Present history: A male age 40 year old was admitted in A.V.B.R.H on 8-11-2021 and with chief complaint of pain and swelling and inability to move left lower limb since 6 days and in present medical the name of surgery is open reduction and internal fixation.

Family history: My patient belongs to nuclear family. There are 4 members in his family. He was diagnosed the intertrochanteric fracture femur left side.

Past history: My patient does not have any past medical history as like diabetic mellitus HIV, AIDS, tuberculosis or any other diseases. In surgical history they have not undergoes any type of surgery.

Clinical findings: Pain in leg, swelling over the leg.

Etiology: Intertrochanteric fractures are most commonly caused by falls or trauma. These issues are particularly common in elderly adults, who are at a greater risk of falling. Walking or standing might cause a fracture in people with weak bones in some situations⁶.

Physical examination: In a head to toe assessment, the patient is not able to to walk properly due to fracture or swelling over the leg.

Diagnostic assessment: Blood test : Hb- 11.3gm%, total WBC count - 10100/cu.mm, total RBC count-5.44 million/cu.mm , RDW- 14%,HCT- 35.4%, Granalocytes- 60%, Monocytes- 0.2%, Lymphocytes- 36% Basophils-00%, Eosinophils- 0.2%, total platelet count- 3.16 lacs / cu.mm.

Therapeutic intervention: Inj.voveron, Tab.paracetamol, Tab.pantaprazole, Inj.tramadol.

Outcomes: After treatment, the patients show improvement. His pain is reduced⁷.

Nursing implementation:

Chart 1. Acute pain related to the secondary swelling over the leg due to fracture.

Nursing implementation	Rationale
1. Assess the level of pain	1.To help in determining the cause of pain
2.provide the trochanter roll	2. To immobilize the fracture to decrease pain and external rotation.
3. Give extra pillow and comfortable position.	3. To help the patient to get relief from the pain.

Chart 2. Disturb sleeping patterns related to disease condition.

Nursing implementation	Rationale
1. Assess the mobility of the client	1. To help in providing baseline data.
2. Maintain the position of femur	2. To prevent stress on fixation of femur bone.
3. Provide the bed pan and urinal to the bedside to the patient. ⁸	3. To help to reduce the risk of constipation.

Discussion: Only a few occurrences of simultaneous bilateral intertrochanteric fractures have been recorded in the literature. It affects less than 0.3 percent of the overall population. This differs from the unilateral form, which is far more prevalent. A high-energy impact is necessary to generate bilateral intertrochanteric fractures in young individuals with good bone stock. Due to low elastic resistance, as observed in osteoporosis, osteomalacia, and primary or secondary neoplasia, just a little amount of force is necessary to generate these fractures in a defective bone. The fracture of a normal bone is frequently induced by a combination of intense rotational and compressive forces.

The fixing method chosen is determined by the fracture configuration and related damage.⁹ Intramedullary nail, proximal femoral nail anti-rotation (PFNA), trochanteric femoral nail (TFN), dynamic hip screw (DHS), and an angle blade plate are some of the therapeutic options available. In stable fractures, a DHS with a plate is used. The PFNA, TFN, or angle blade plate is utilized for unstable fractures and those with loss of medial cortical support.¹⁰ When there is an accompanying femoral shaft fracture, an intramedullary nail is used. Because of the concomitant femoral shaft fracture, we employed an intramedullary nail on the left side in the index case, and a reversed distal.¹¹

Conclusion: The patient age is 40 year old male. They are suffering from intertrochanteric fracture femur left side with same complaint. He is admitted in 8 -11-21.

Disclaimer regarding Consent and Ethical Approval:

As per university standard guideline, participant consent and ethical approval have been collected and preserved by the authors

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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