Fractures of the lower end of the femur

Fractures of the distal end of the femur are most commonly caused by so-called **high energy injuries** – car accidents, falls from height, or are often part of polytrauma.

Fracture of the distal end of the femur

Etiology

Etiologically, there are two basic groups of distal femur fractures.

Fractures caused by high energy

Fractures caused by high energy, for example, in traffic accidents, falls from heights, and are often part of polytrauma. They are predominantly intra-articular.

Fractures of old age

High-energy fractures are caused by low-impact forces, such as in a normal fall, and are associated with osteoporosis.

Clinical picture

Fractures of the distal end of the femur have a significant clinical picture that includes: swelling, tenderness, crepitus, haemarthrosis, popliteal haematoma and deformity.

Diagnosis

The basichistory is taken in an attempt to determine the mechanism of injury. This is followed by clinical examination and imaging(X-ray, CT).

Therapy

Conservative

Quite rarely, only for non-displaced and uncomplicated fractures.

Surgical

Surgery is indicated in the vast majority of cases of distal femur fractures. During surgery, emphasis is placed on anatomical repositioning, restoration of joint surface congruence and stabilization of the bone.

Surgical techniques

Combing

Combing is most commonly used to treat periprosthetic fractures. Surgical transligamentous approach through the fossa intercondylaris.

Condylar splint

Surgical splint therapy is most commonly performed by lateral skin incision approximately 1.5 to 2 cm lateral to the patella. The repaired fracture can then be fixed with wires or screws.

Related articles

- Fractures of the proximal femur
- Fractures of the femoral diaphysis
- Types of fractures and their dislocations
- Osteosynthesis and its principles

Adapted from

Literature used

- WENDSCHE, Peter – VESELÝ, Radek. *Traumatology.* 1. edition. 2001. 344 pp. ISBN 9788074922114.
- SOSNA, A – VAVŘÍK, P – KRBEC, M, et al. *Fundamentals of orthopaedics.* 1. edition. Prague : Triton, 2001. 175 pp. ISBN 80-7254-202-8.