

# Soft knee injury

One of the most common injuries of the musculoskeletal system are soft knee injuries, which can be acute and can be caused by different mechanisms. Improper or incomplete healing, they can then develop chronic instabilities.

## Acute injury

According to the mechanism of the injury, it is divided into:

- **Medial instability,**
- **Lateral instability,**

### Medial instability

They are caused by violent abduction and internal rotation of the fibula and tibia or by direct force applied to the joint from the outside. First, the ligamentum collaterale tibiale, joint capsule and menisci are damaged. With further exposure, the ligamentum cruciatum anterius (possibly also the ligamentum cruciatum posterius) may be torn.

### Lateral instability

They are less common than medial instabilities. They are caused by violent adduction and rotation of the tibia and fibula or by direct action from the inside. First, the ligamentum collaterale fibulare, joint capsule and menisci are damaged. In addition, the ligamentum cruciatum anterius and "ligamentum cruciatum posterius" can be damaged. The common peroneus nerve can be injured.

It also includes:

- **Hyperextension injuries** – caused by violent hyperextension, damage to the back of the joint capsule, ligamentum cruciatum anterius et posterius and menisci.
- **Isolated injuries of the ligamentum cruciatum anterius** - arise from violent rotation of the tibia and fibula during the end phase of extension.
- **Isolated injuries of the ligamentum cruciatum posterius** - arise from direct action on the front surface in flexion.

Poranění *ligamentum collaterale tibiale* jsou 15x častější než poranění *lig. collaterale fibulare*. Zranění *lig. cruciatum anterior* jsou 10x častější než zranění *lig. cruciatum posterius*. Bolestivost a otok v místě poranění bývá při poranění povrchových vazivových struktur – *ligamentum collaterale* a pouzdra. Náplň kloubu, která vznikne bezprostředně po úrazu, je většinou *hemartros*. Svědčí o závažnějším poranění.

## Chronic instability of the knee joint

Chronic instabilities arise from improperly healed or incompletely healed ligament injuries. Slight instabilities in collateral ligament insufficiency are mostly compensated by the function of dynamic stabilizers (muscles) and are functionally insignificant. In the case of insufficiency of the cruciate ligament, secondary stabilizers gradually distend and instability worsens. Functional instability with frequent manifestations of "knee falling out" leads to damage to the menisci, articular cartilage and the development of arthrotic changes. Chronic instability can be favorably influenced by appropriately conducted rehabilitation. If difficulties persist even during normal daily activity, an operative solution is indicated.

## Links

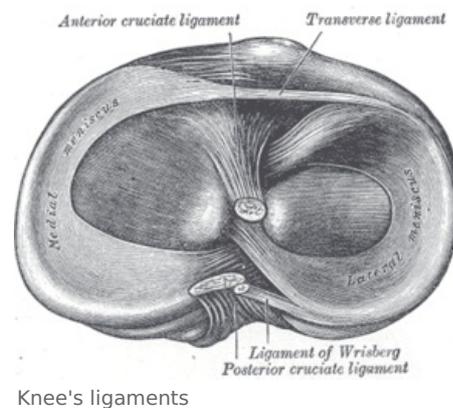
### related articles

- Biomechanics of the knee joint
- Bones of the lower limb
- Joints of the lower limb
- Meniscus

### External links

- Anatomina (<http://www.anatomina.org/>)

## Source



- ČECH, Oldřich, Antonín SOSNA a Jan BARTONÍČEK. *Poranění vazivového aparátu kolenního kloubu*. 1. vydání. Praha : Avicenum, 1986. 195 s.