

Tibia plateau fraktur

Frakturtyper, behandling og kirurgiske adgange



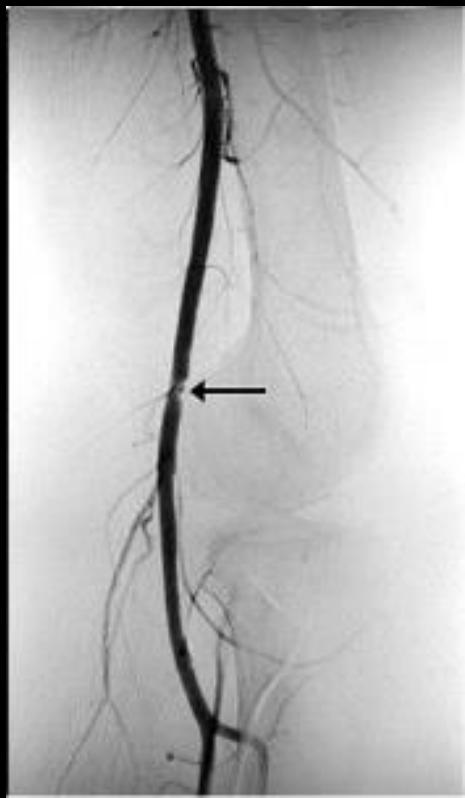
Jeppe Barckman
Aarhus Universitetshospital

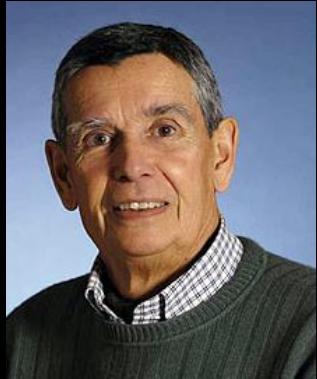
AO Basic Principles Course
Fredericia april 2019



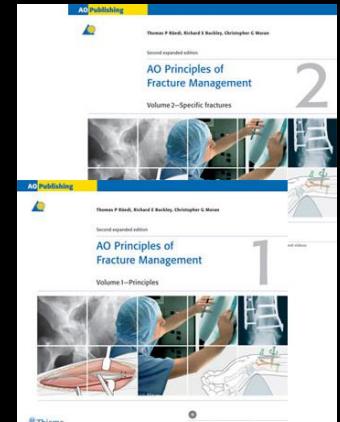
Bløddele !

- Tyndt bløddelslag
- Høj/lav energi
- Neurovaskulære forhold
- Compartiment syndrom





Bløddele !

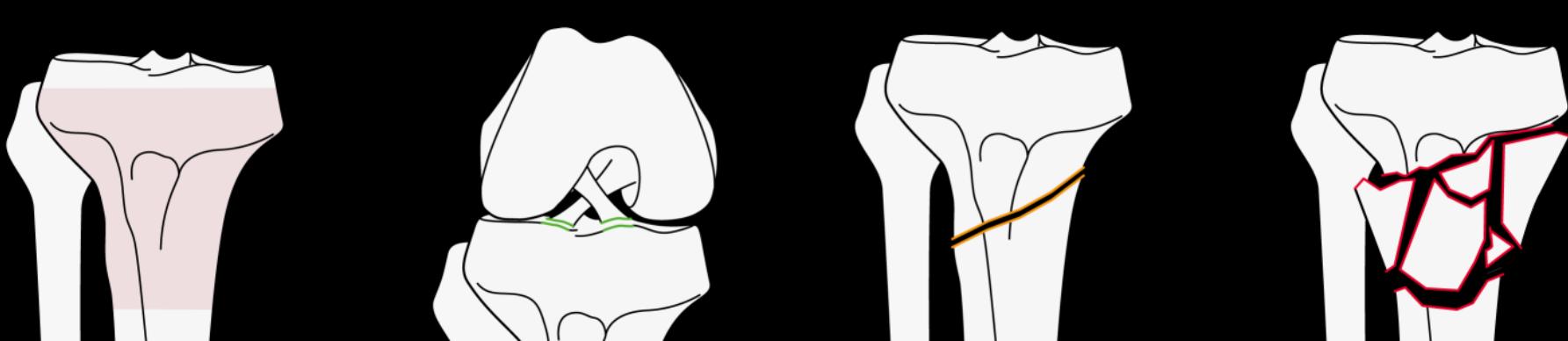


Thomas P Rüedi, MD, Professor, Founding and honorary member of the AO Foundation

“a fracture first and foremost is a soft-tissue injury, in which the bone happens to be broken”

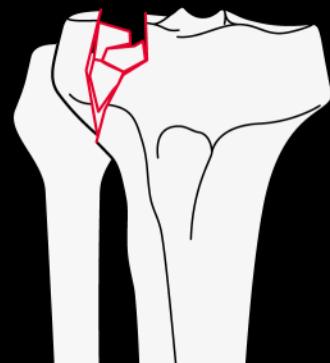
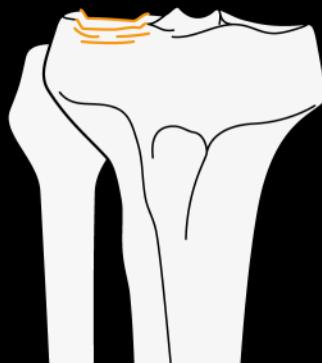
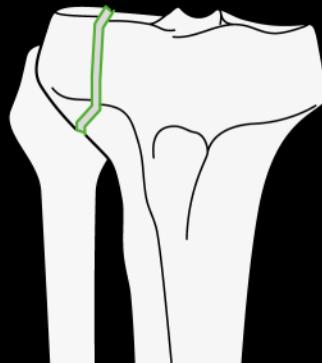
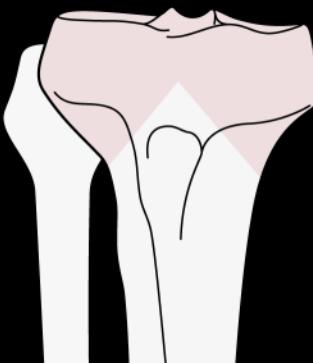
Classification of proximal tibial fractures (41-A)

- A: Ekstraartikulær
 - A1: avulsion
 - A2: metaphyseal simple
 - A3: metaphyseal multifragmentær



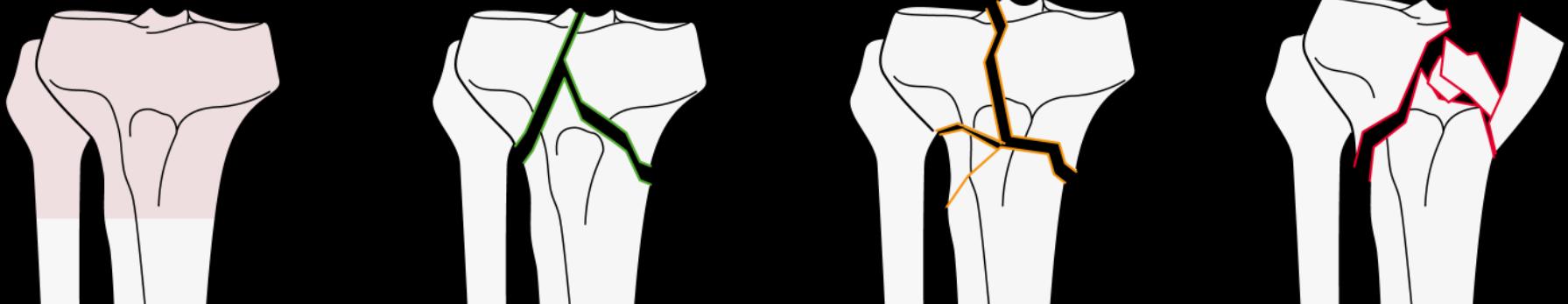
Classification of proximal tibial fractures (41-B)

- B: Partial articular
 - B1: pure split
 - B2: pure depression
 - B3: split-depression

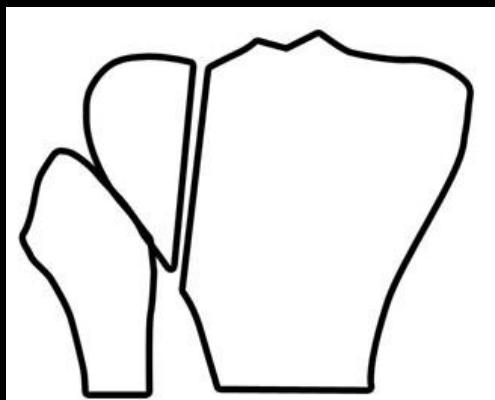


Classification of proximal tibial fractures (41-C)

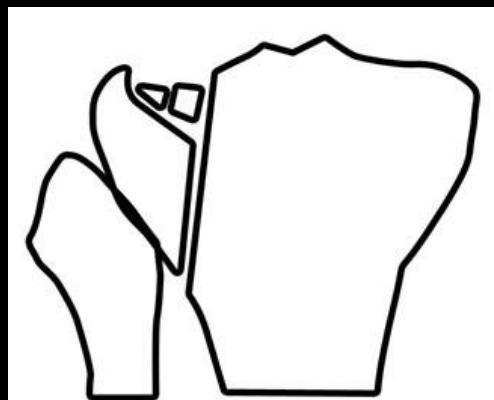
- C: Complete articular
 - C1: articular simple, metaphyseal simple
 - C2: articular simple, metaphyseal multifragmentær
 - C3: articular multifragmentær



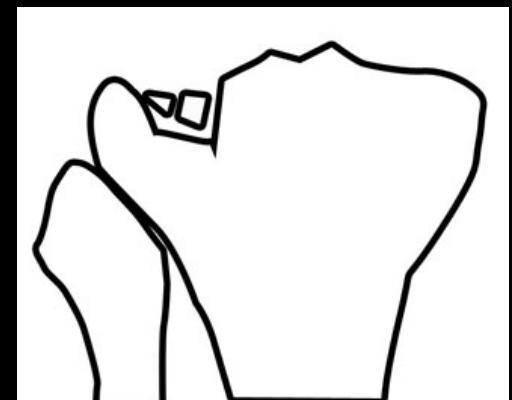
Schatzker



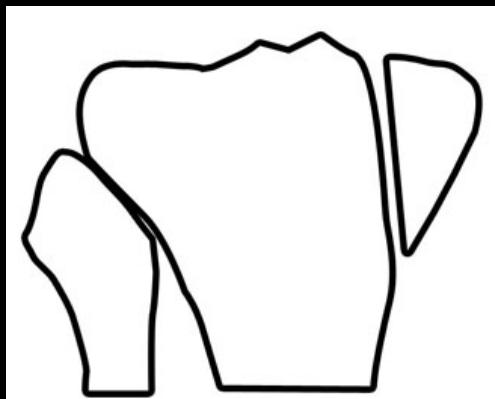
Schatzker I



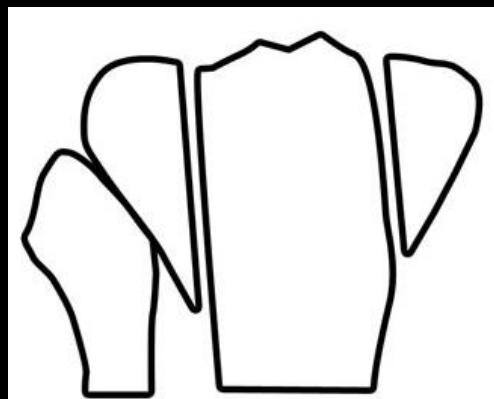
Schatzker II



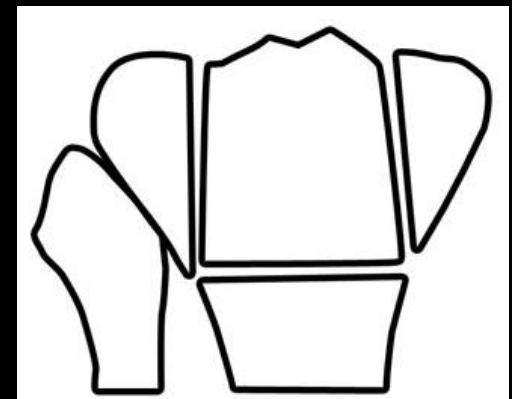
Schatzker III



Schatzker IV



Schatzker V

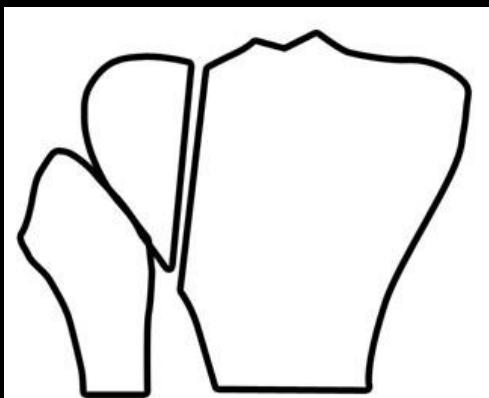


Schatzker VI

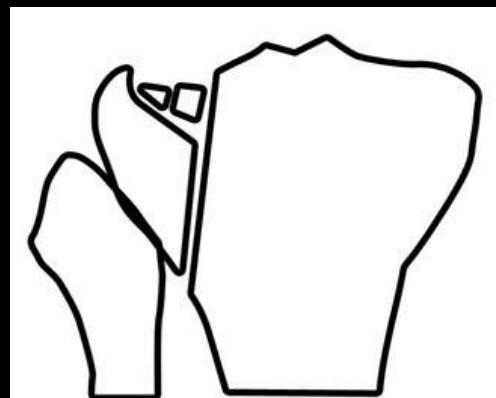
Schatzker J, McBroom R, Bruce D (1979)
Clin Orthop Rel Res 138:94–104



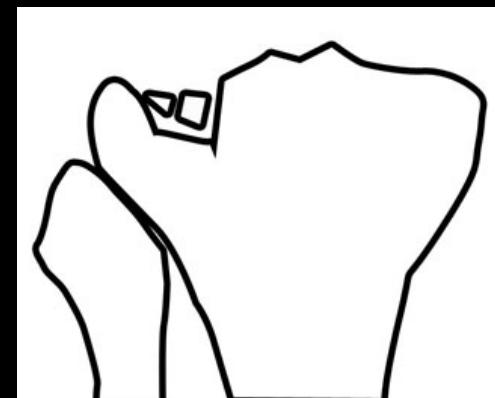
Schatzker



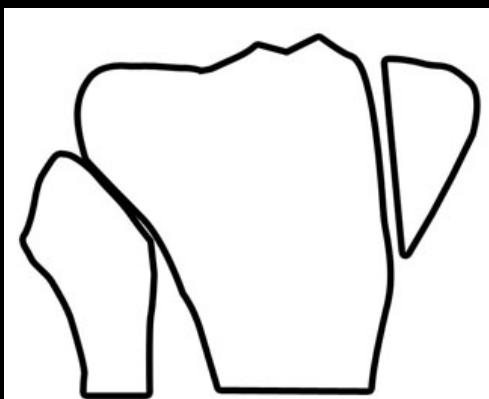
Schatzker I



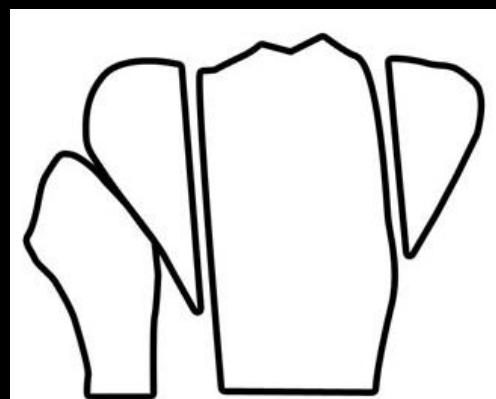
Schatzker II



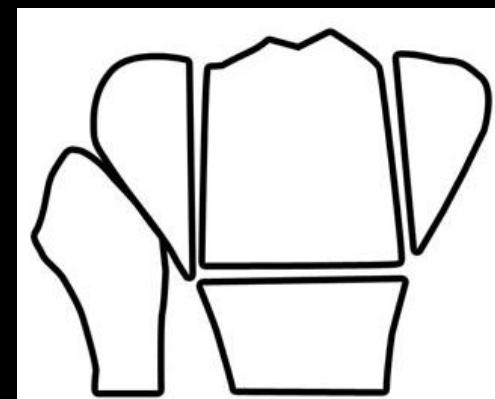
Schatzker III



Schatzker IV



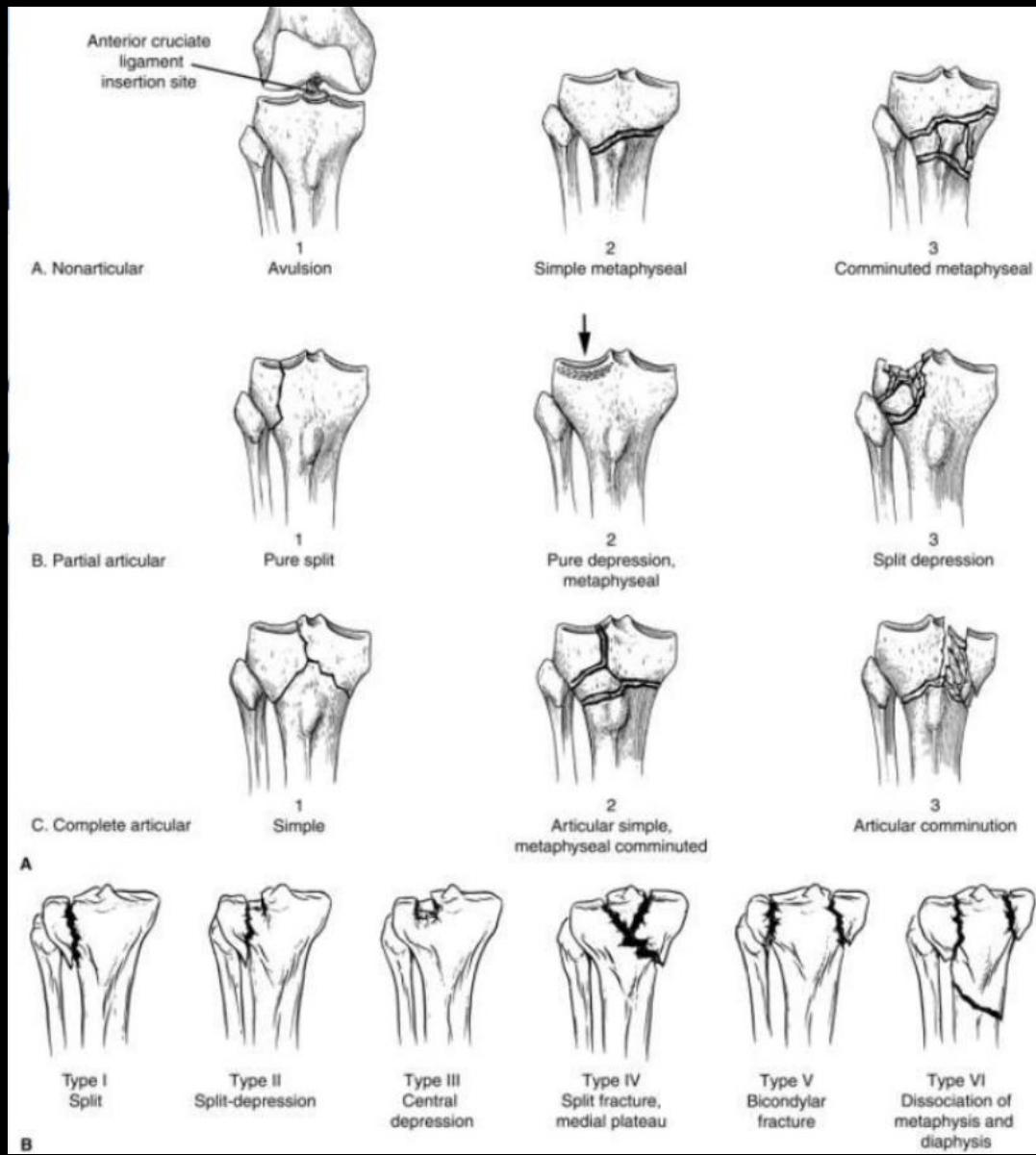
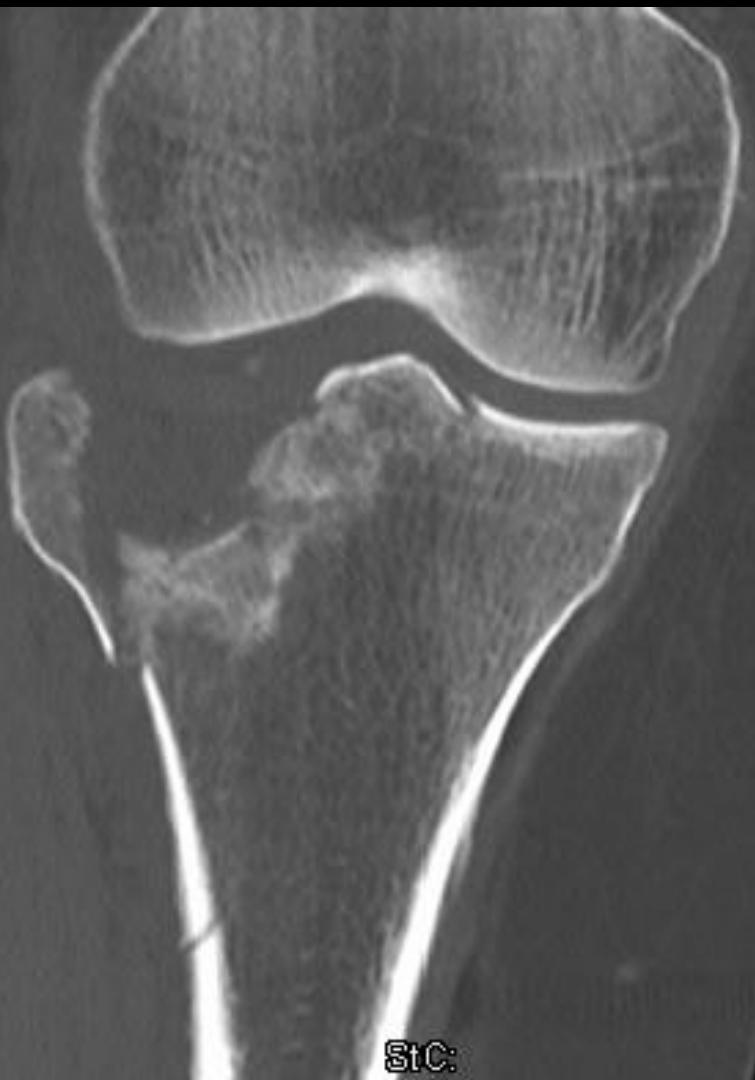
Schatzker V



Schatzker VI

*Schatzker J, McBroom R, Bruce D (1979)
Clin Orthop Rel Res 138:94–104*

Hvilken type?



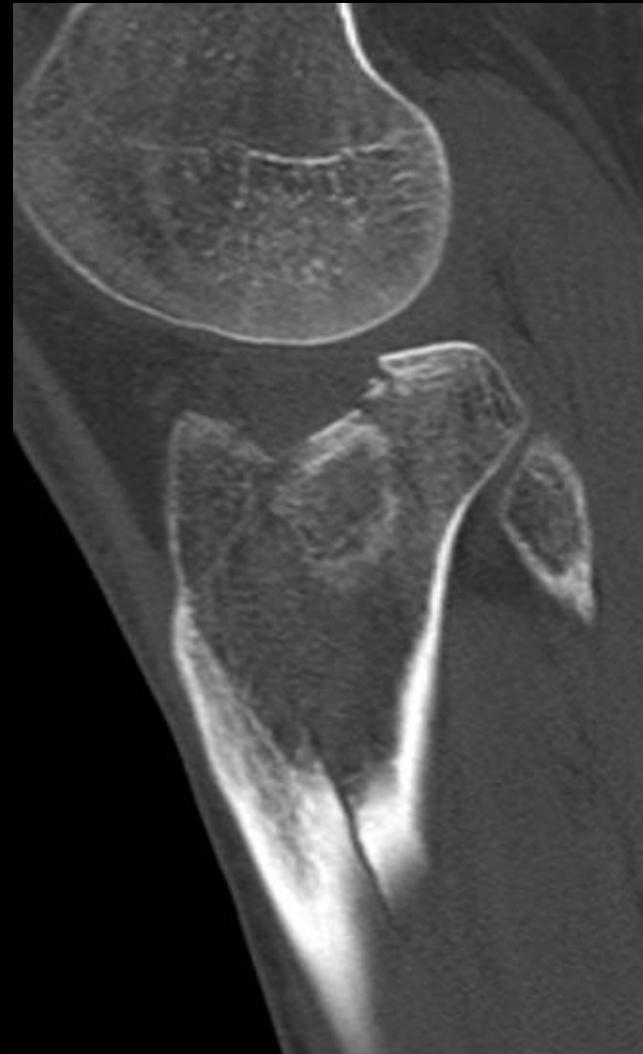
33 år kvinde.

Vrid i hø knæ under ridning



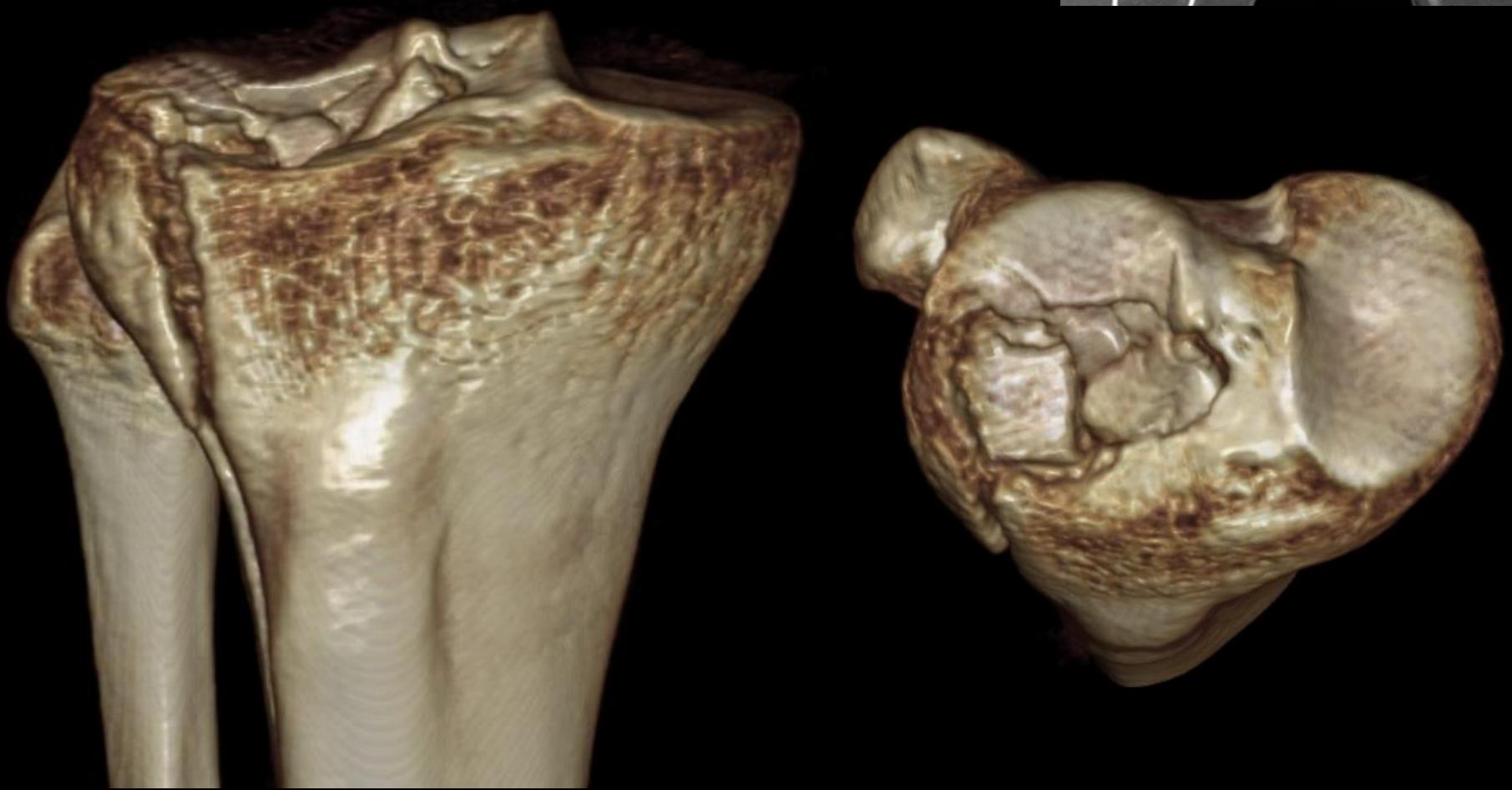
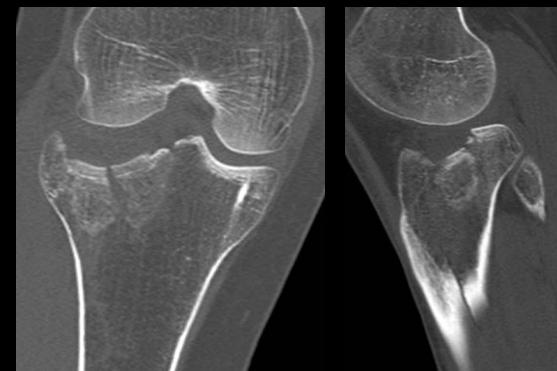
33 år kvinde.

Vrid i hø knæ under ridning



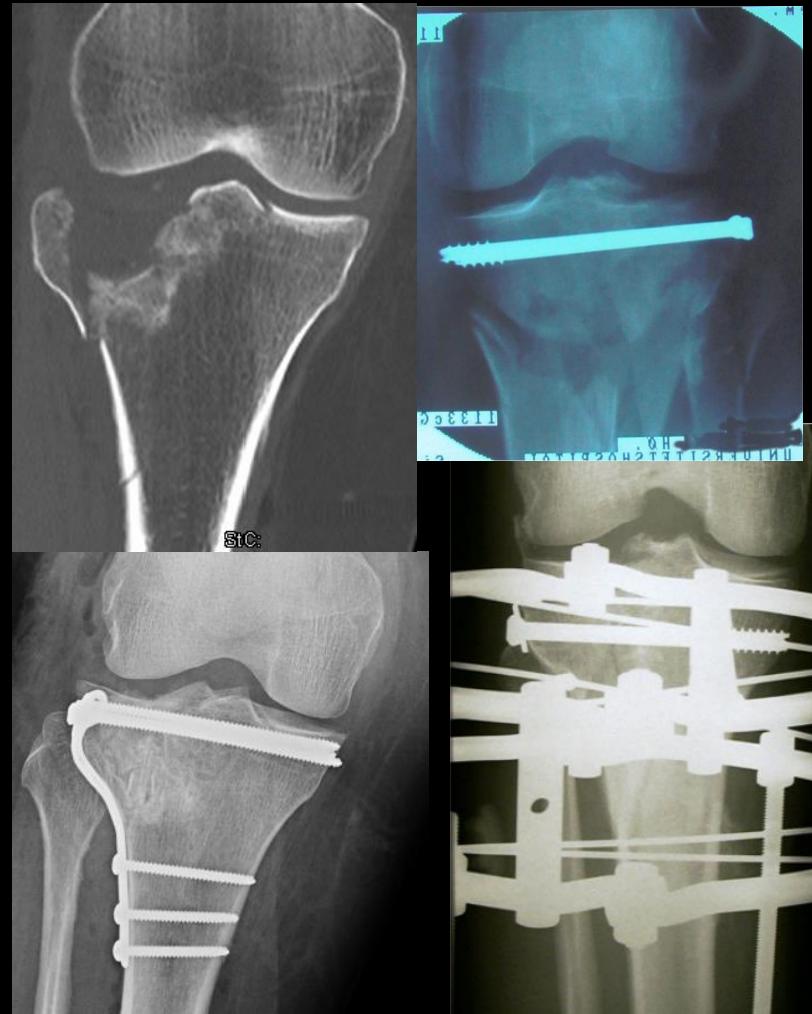
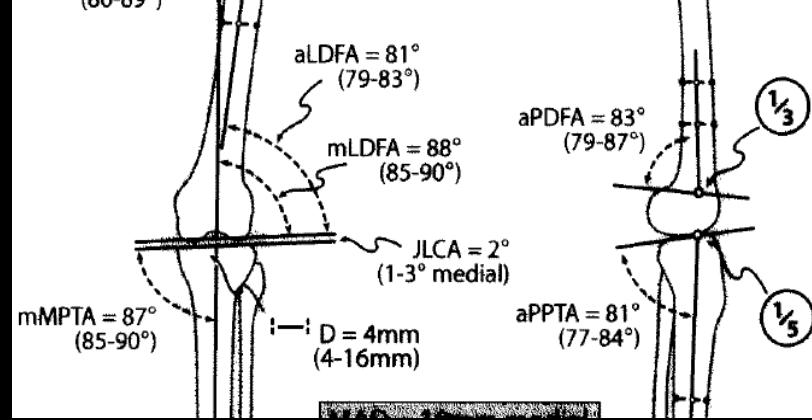
33 år kvinde.

Vrid i hø knæ under ridning

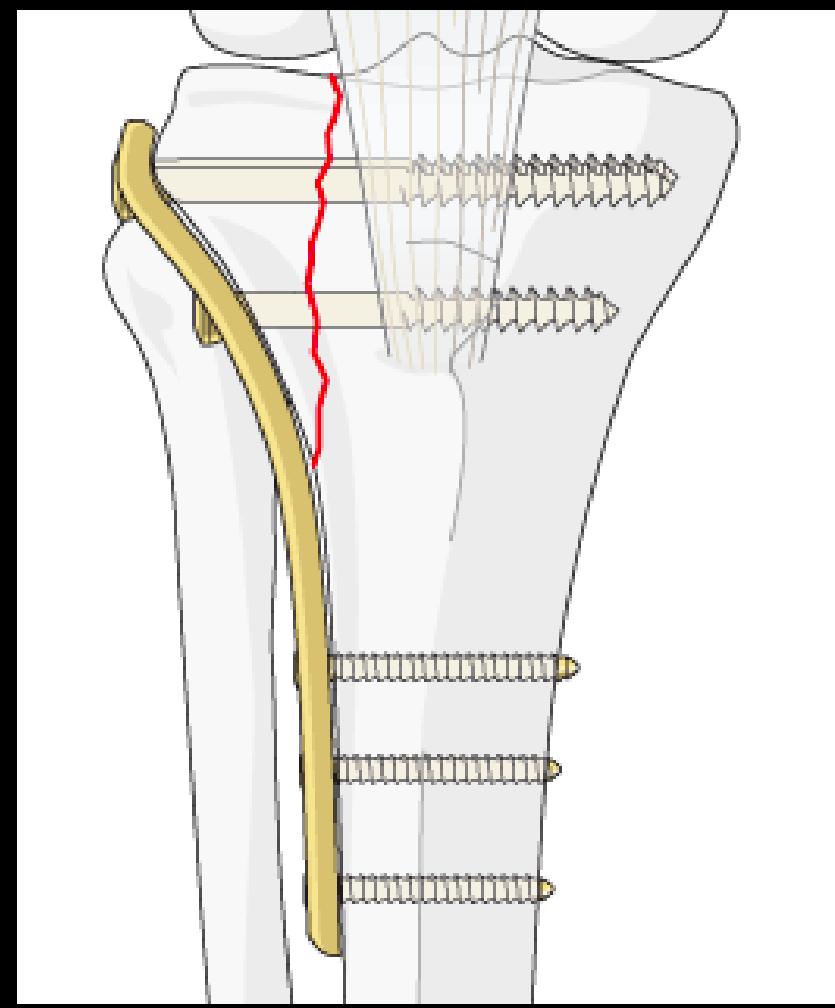
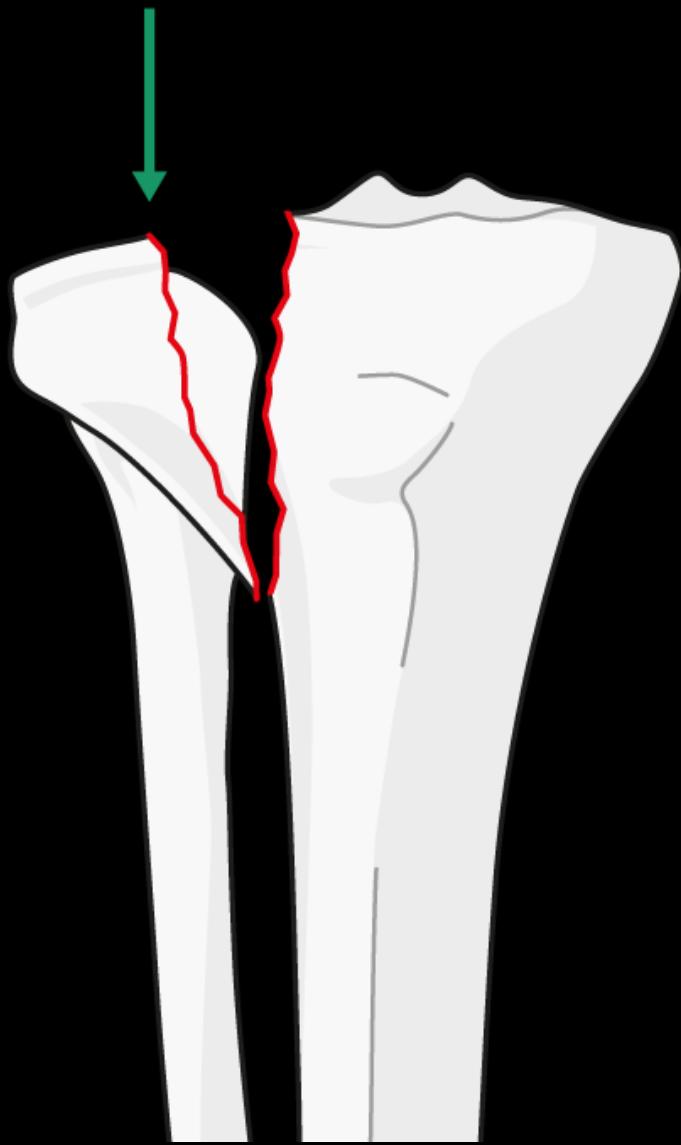


Behandlingsmål proximal tibia

- Anatomisk rekonstruktion af ledflade inkl. kondyl bredde
- Absolut stabilitet (*om muligt*)
- Genskabe akser og rotation
- Stabil fiksation til metafyse/diafyse
- Tidlig bevægelse



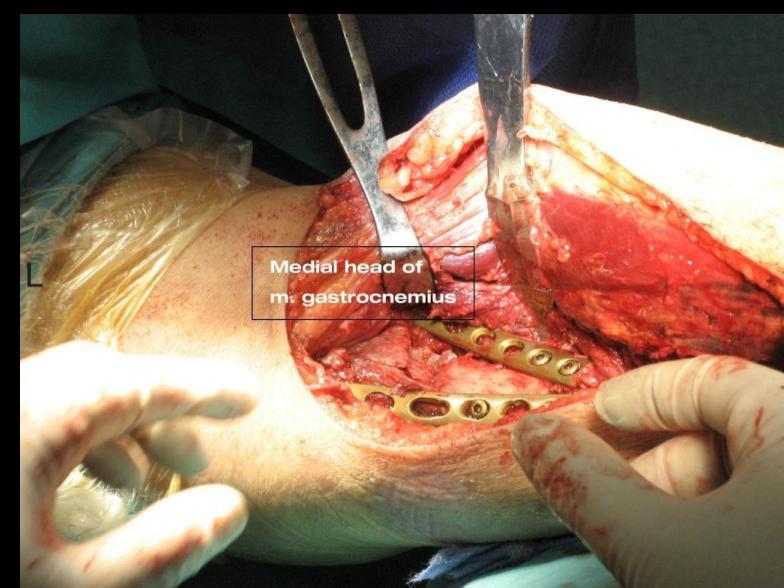
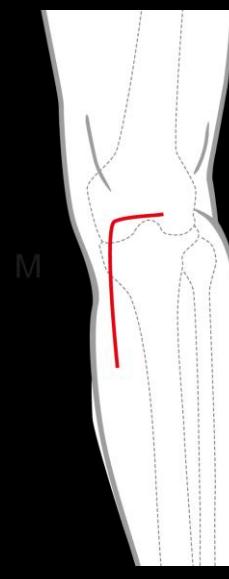
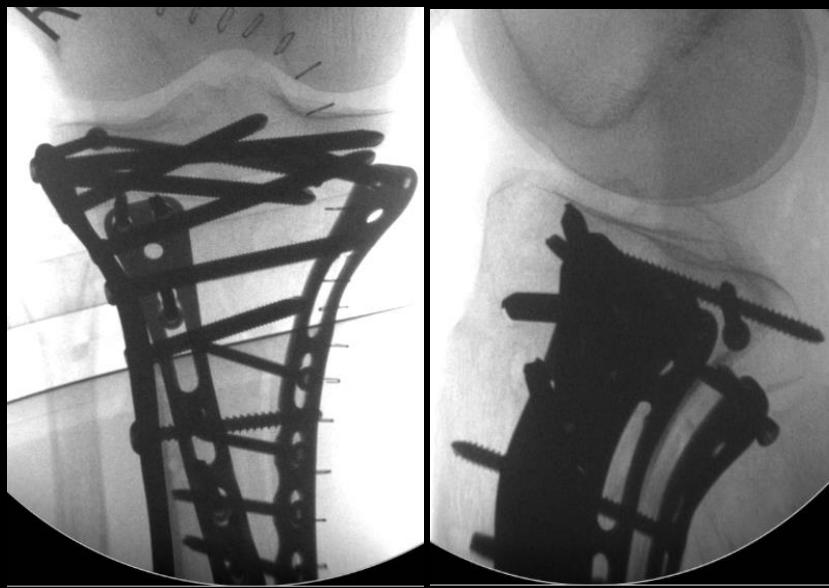
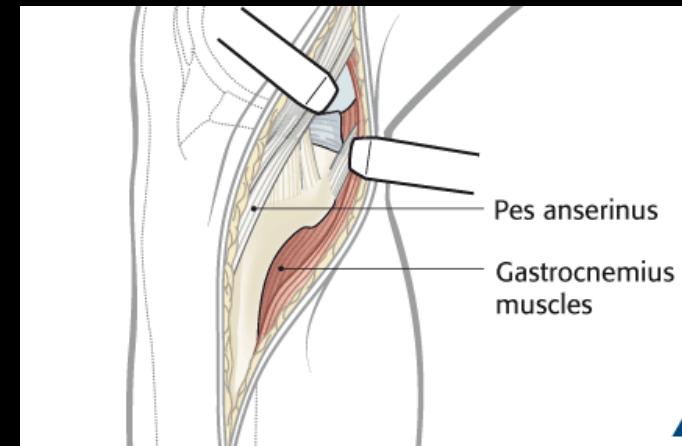
Behandling



Kirurgisk adgange

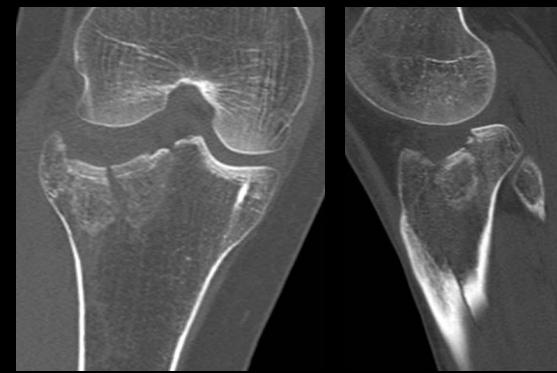
Proximal tibia

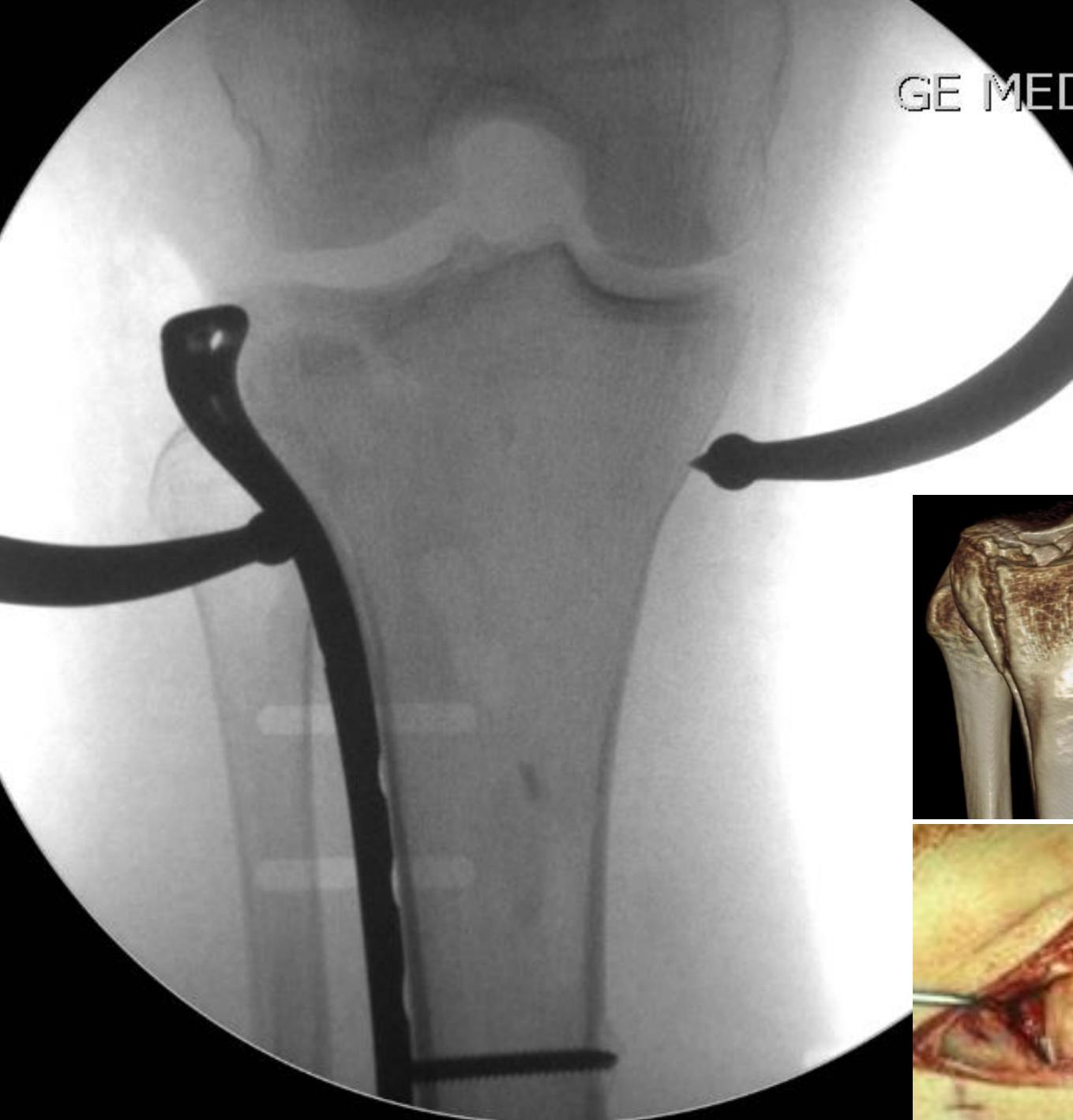
- Anterolateral
- Posteromedial
- Posterior



33 år kvinde.

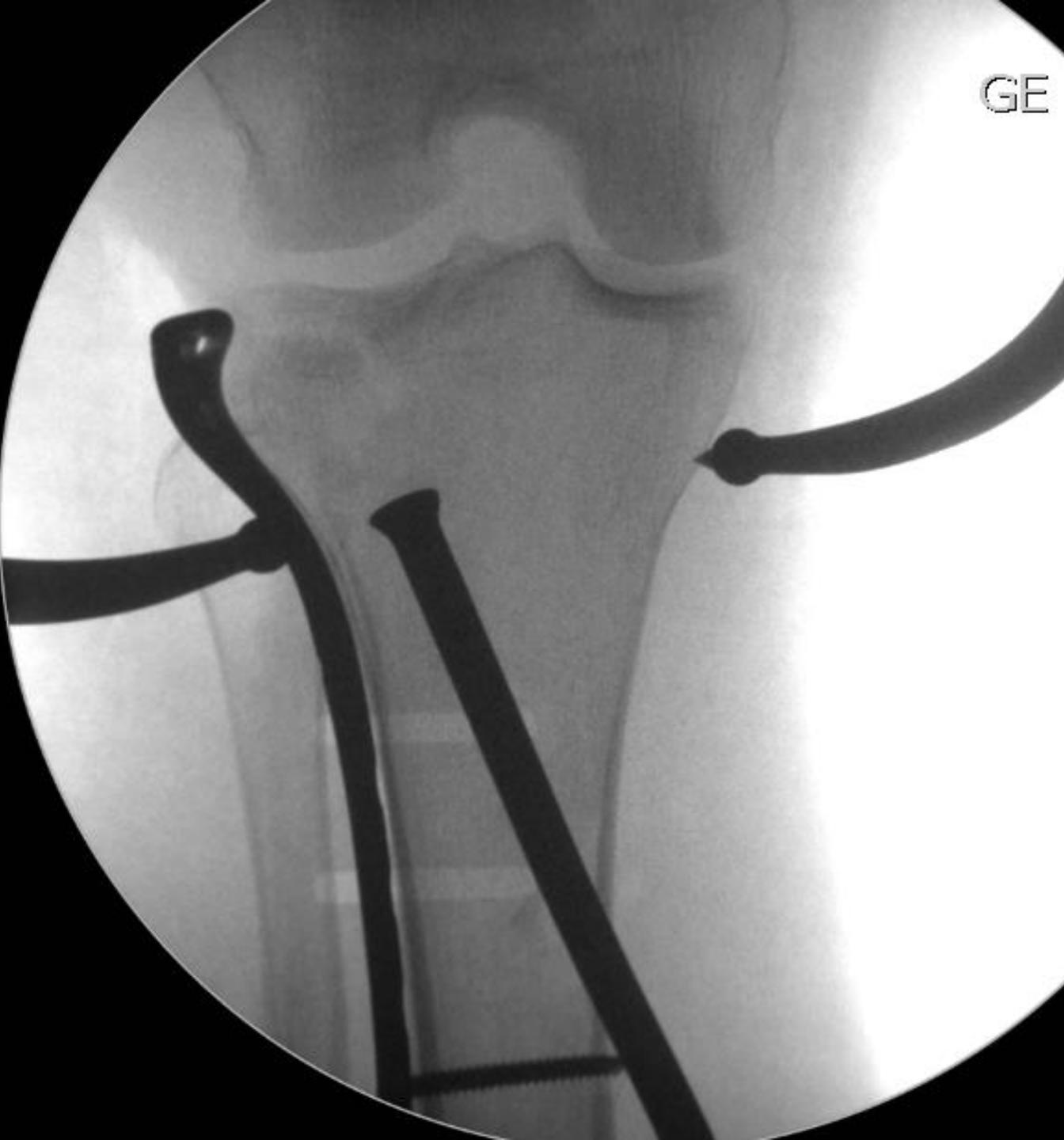
Vrid i hø knæ under ridning



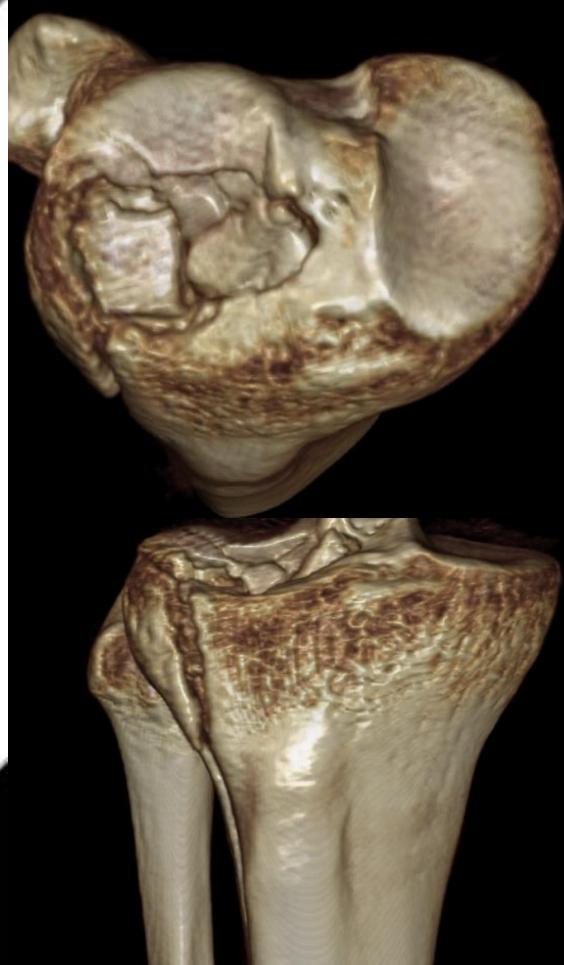
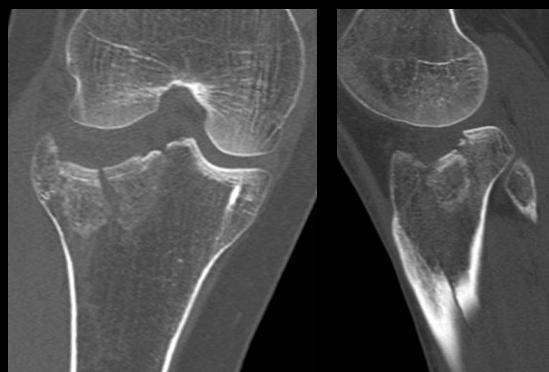


GE MEDICAL

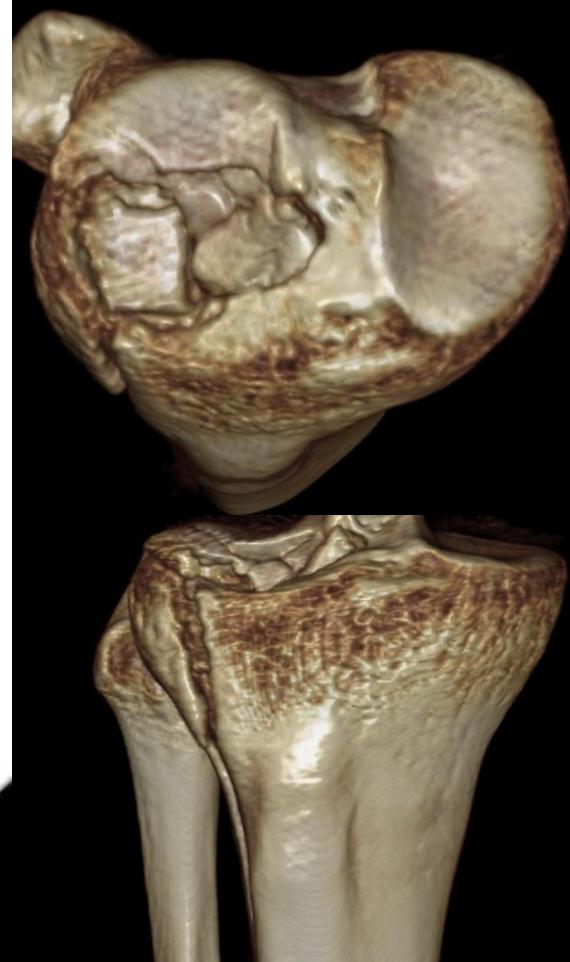
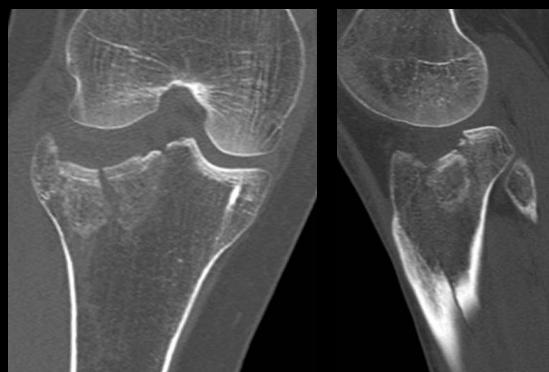


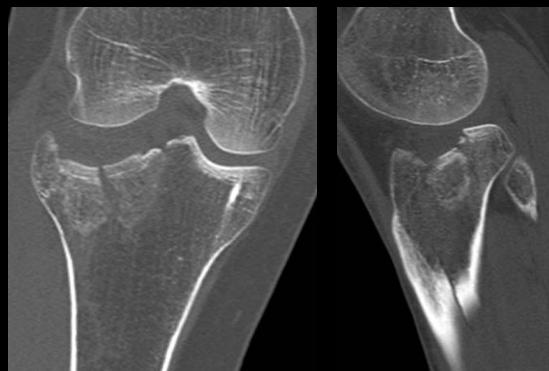


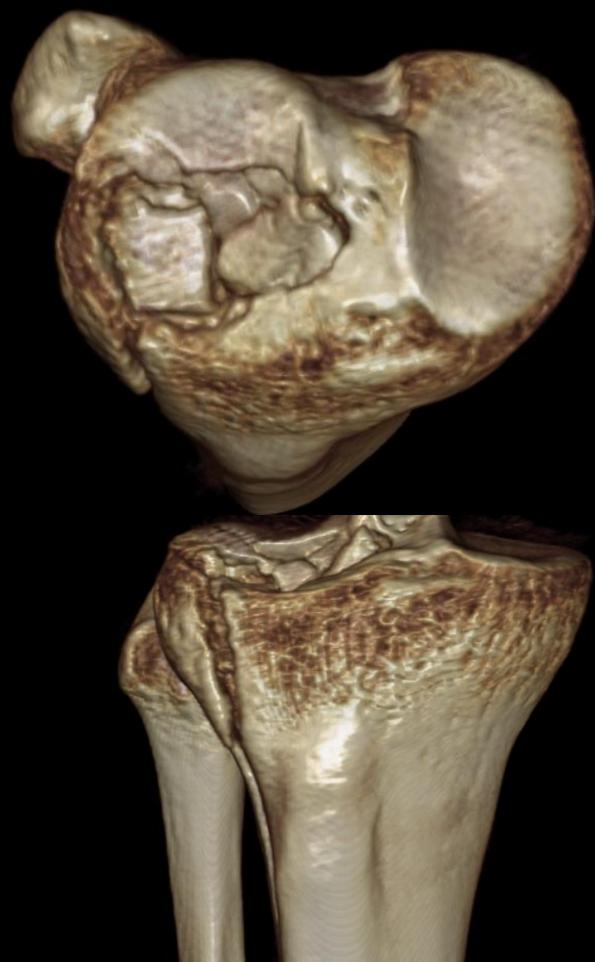
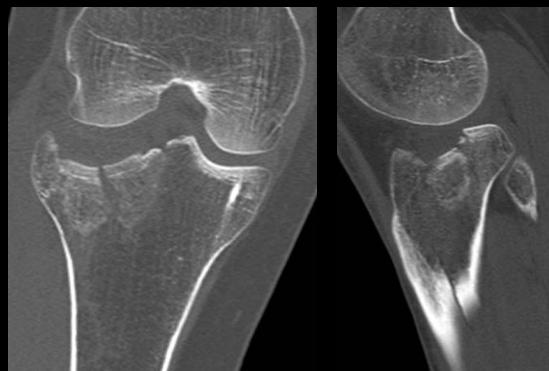
GE



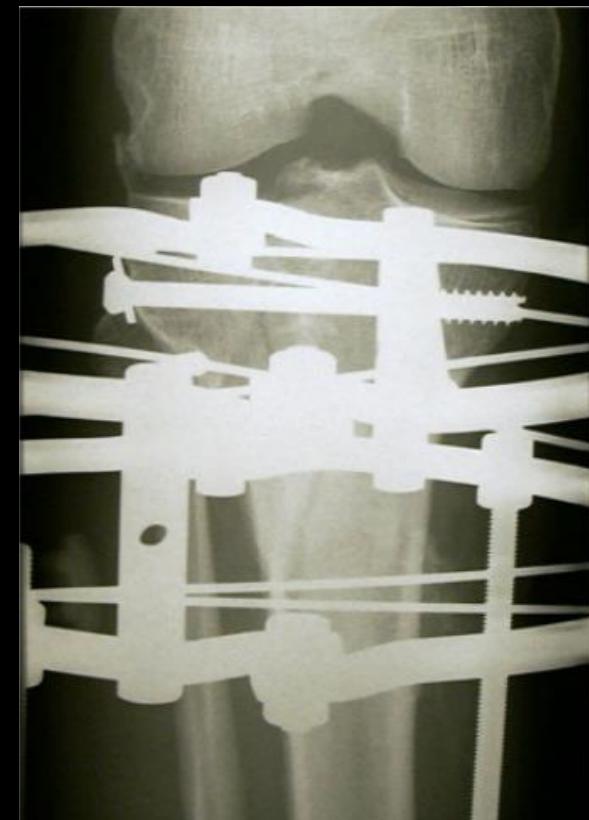
GE







Ilizarov ekstern fiksation



Ilizarov ekstern fiksation

Fordele:

- Minimal forstyrrelse af bløddede i frakturområdet
- Mulighed at stabilisere knæet ved ligamentærløshed

Ulemper:

- Udvendig fiksator, kræver pleje; fjernes først når frakturen er helet
- Hyppige pin-hul infektioner - hyppige ambulante kontroller hos problempatienter
- Forhindrer fuld fleksion



?

Take-home messages

- Opmærksom på bløddele
 - afgør valg af behandling + timing
- Operations mål:
 - anatomisk reponering af ledflade
 - Korrekt akse og rotation.
 - God fiksation til metafyse/diafyse
- God præoperativ planlægning . Altid CT
- Ved dårlig bløddele er ringfiksation 1.valg.
- YDMYGHED – det er svært!!!

