



Universitat Autònoma de Barcelona

PCL Tibial-Sided Avulsion Injuries

How I do it !

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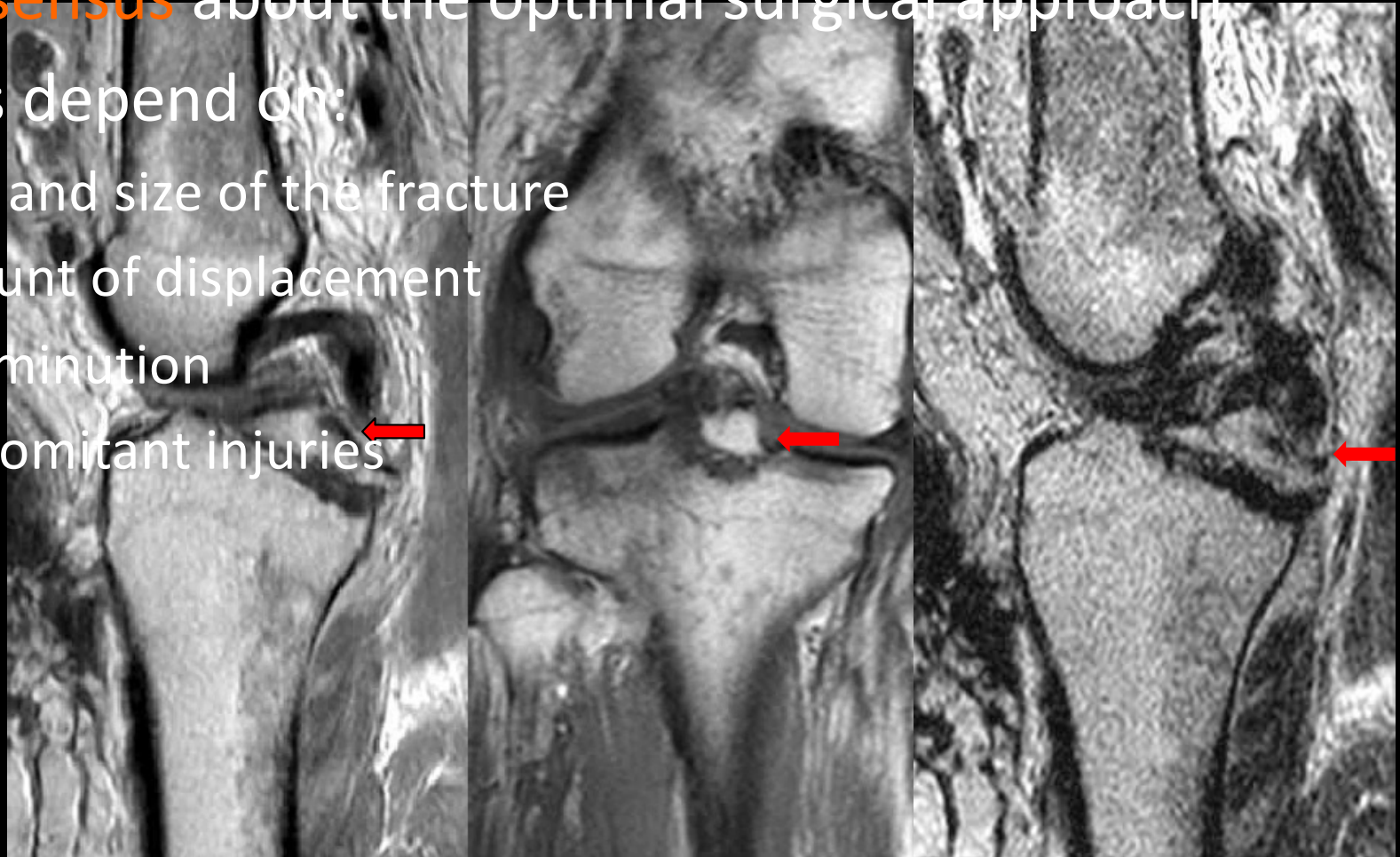




**NOTHING
TO DECLARE**

PCL Tibial-Sided Avulsion Injuries

- Unfrequent injuries
- Generally require surgery
- No consensus about the optimal surgical approach
- Options depend on:
 - type and size of the fracture
 - amount of displacement
 - comminution
 - concomitant injuries



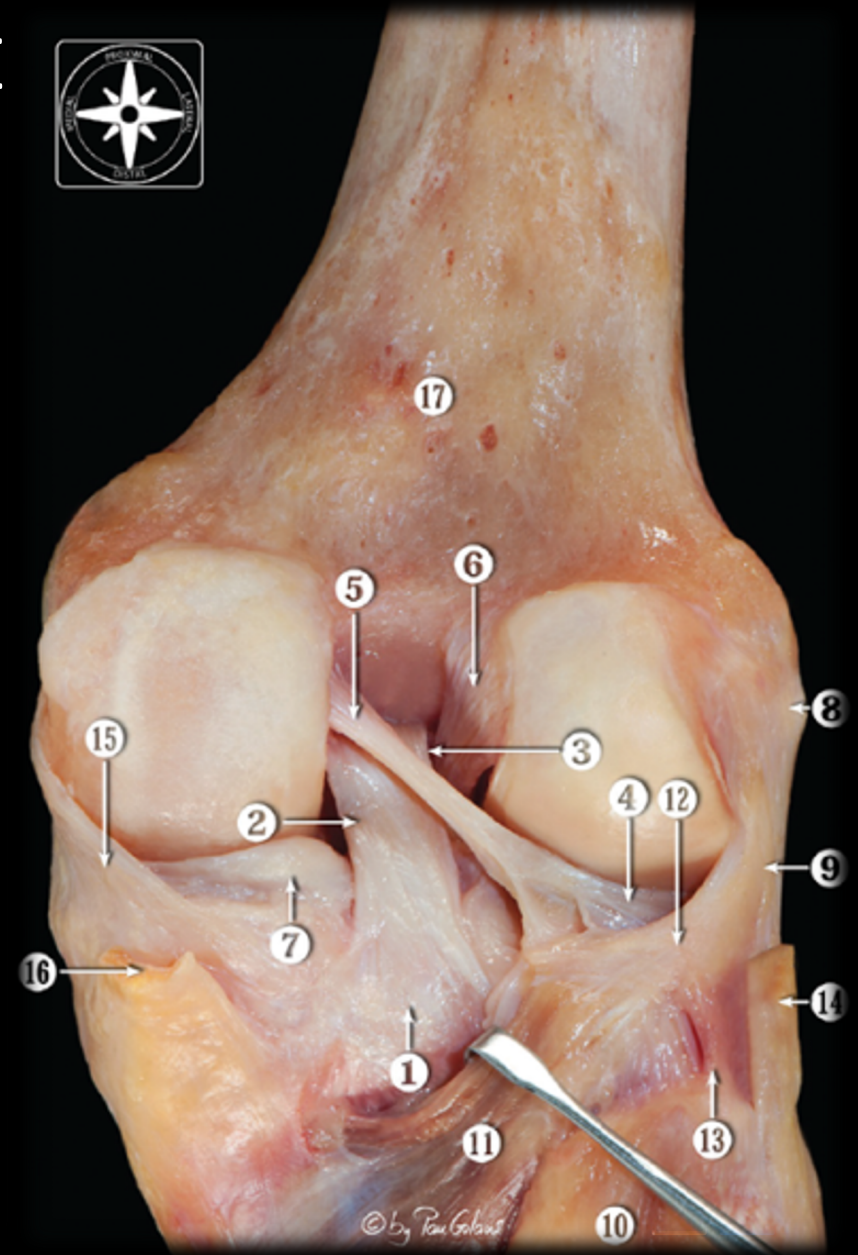
PCL Tibial-Sided Avulsion Injuries

POSTERIOR ASPECT OF THE KNEE

- Complex anatomy



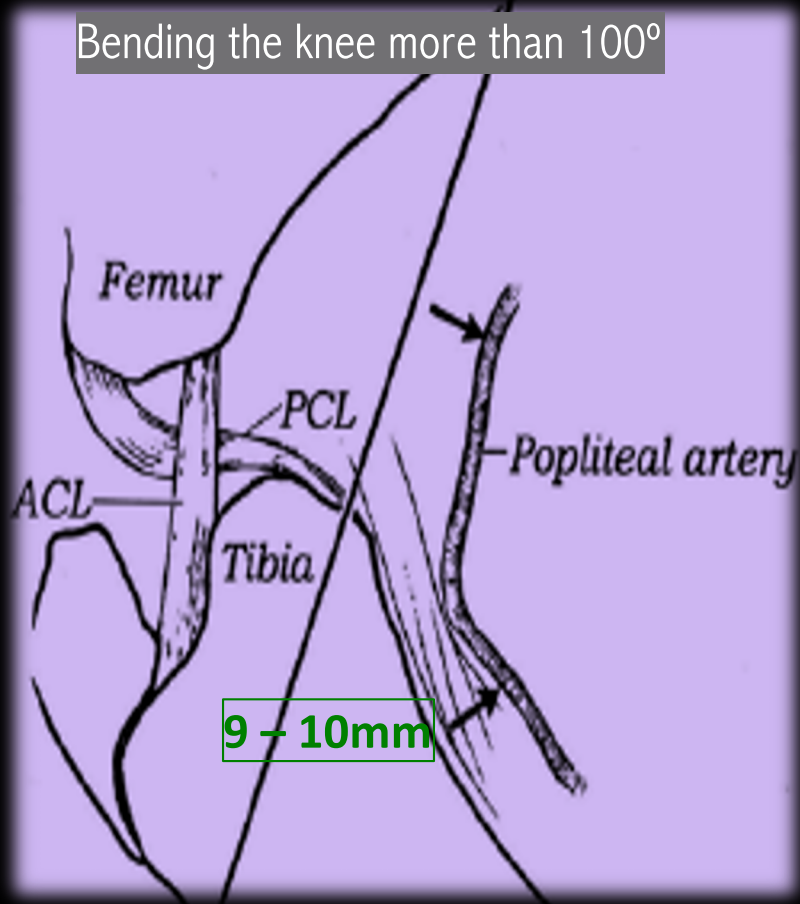
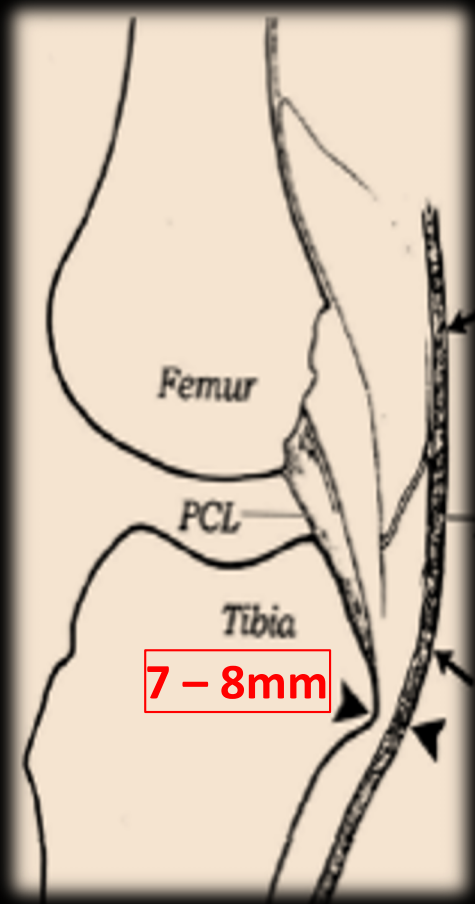
Courtesy of Pau Golanó MD, RIP



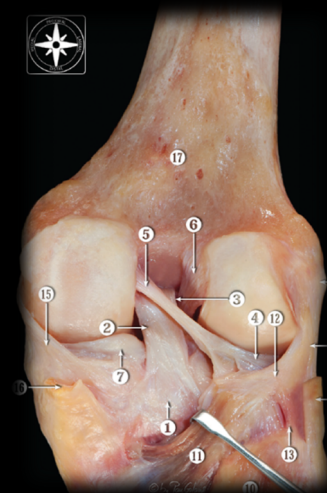
PCL Tibial-Sided Avulsion Injuries

POSTERIOR ASPECT OF THE KNEE

- Complex anatomy



Bending the knee more than 100°

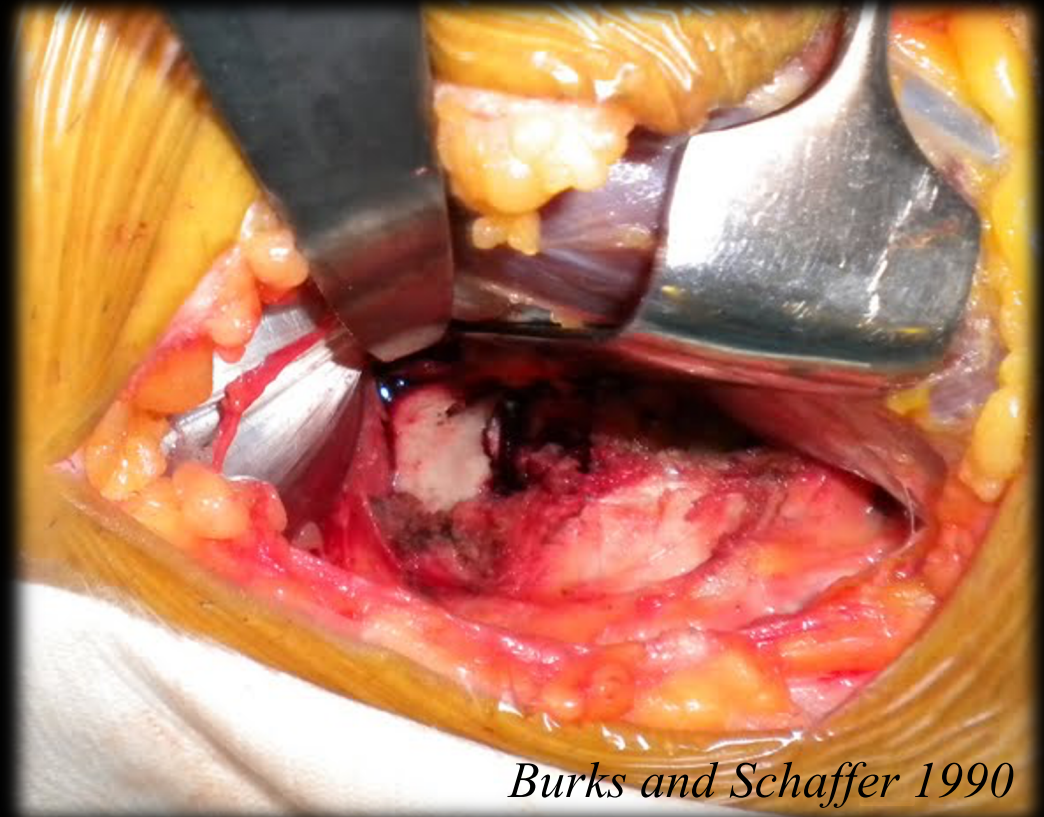
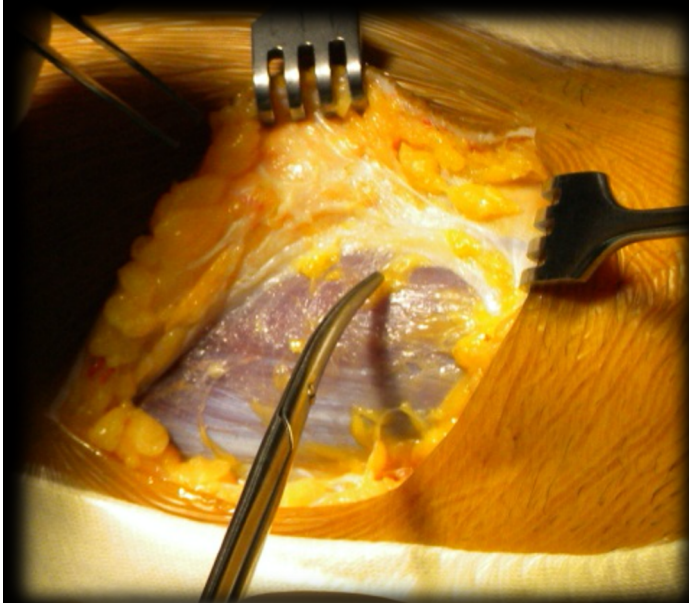


Modified Posterior Trickey Approach

- Patient in prone position
- Knee flexed to 30°
- Inverted L incision along the flexion crease
- Interval between medial gastroc and semiM bluntly dissected
- Capsule vertically incised
- Tibial attachment of the PCL is now exposed
- NV bundle protected by laterally retracted medial gastroc

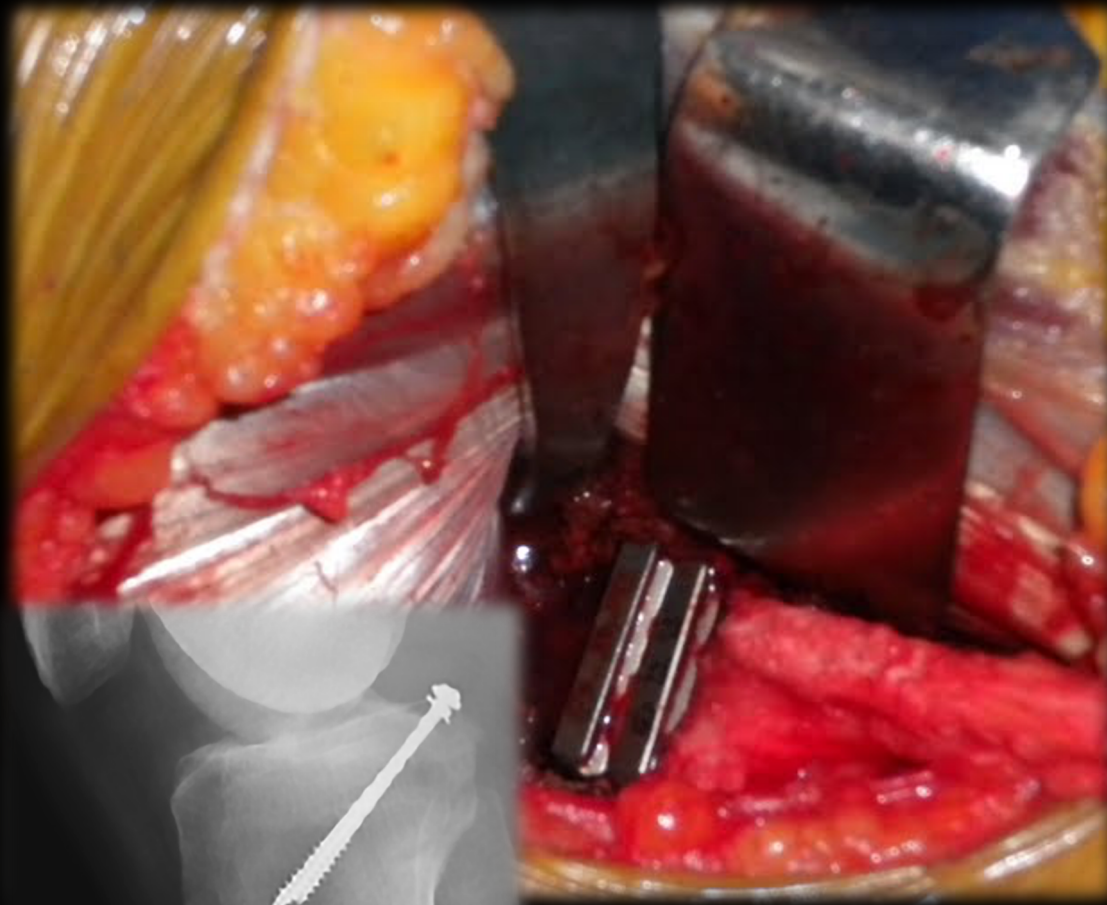


Modified Posterior Trickey Approach



Burks and Schaffer 1990

Modified Posterior Trickey Approach



E



Burks and Schaffer 1990



ARTHROSCOPICALLY ASSISTED REPAIR

COMPLEX INJURIES

- Intra & extraarticular associated injuries



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ARTHROSCOPICALLY ASSISTED REPAIR

COMPLEX INJURIES

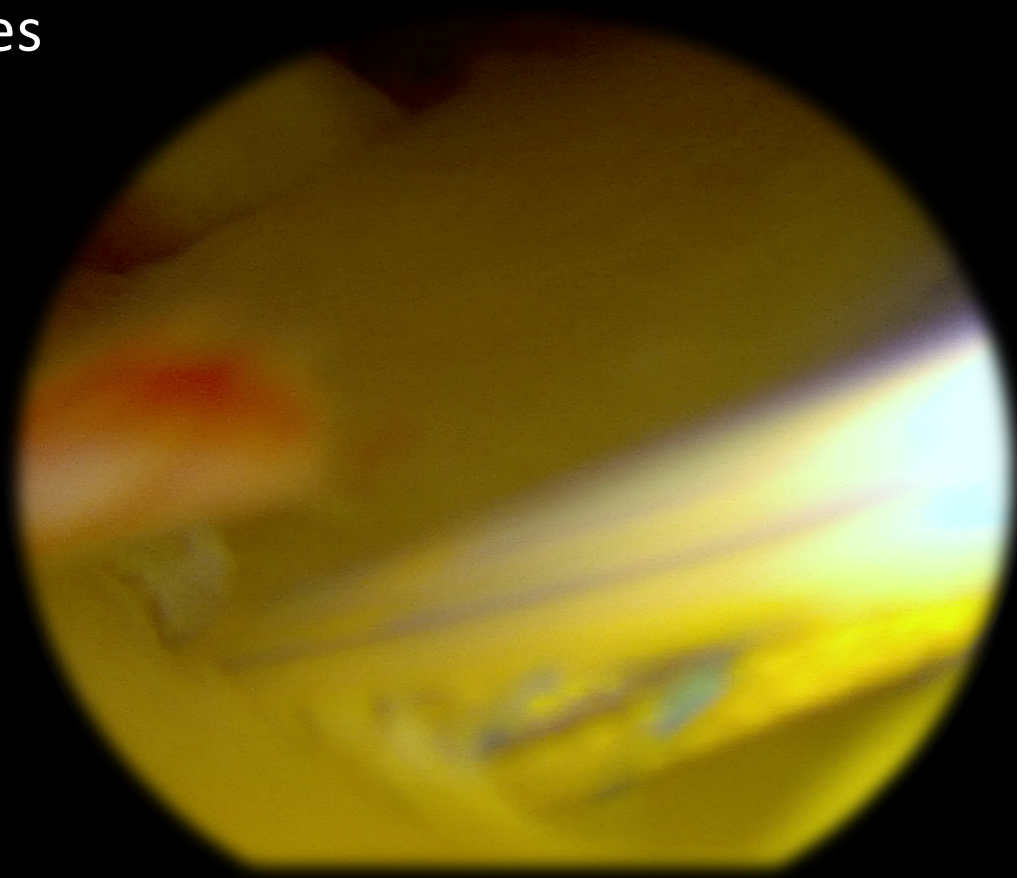
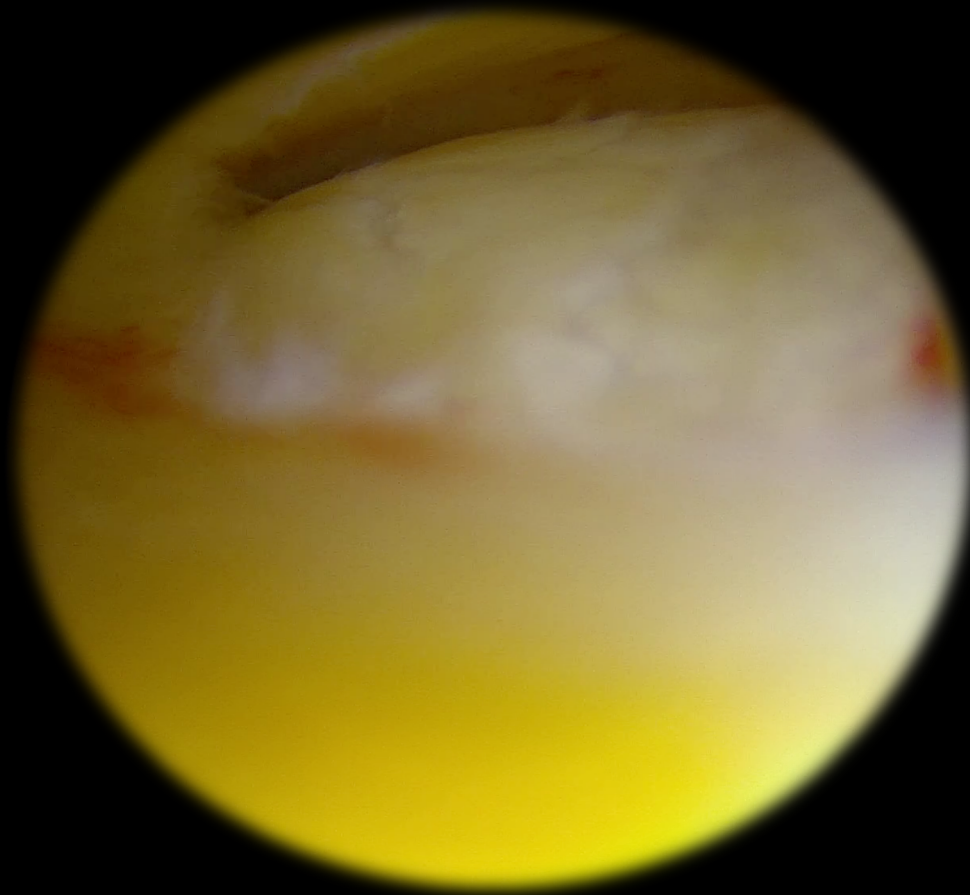
- Reduction, grafting & fixation



ARTHROSCOPICALLY ASSISTED REPAIR

COMPLEX INJURIES

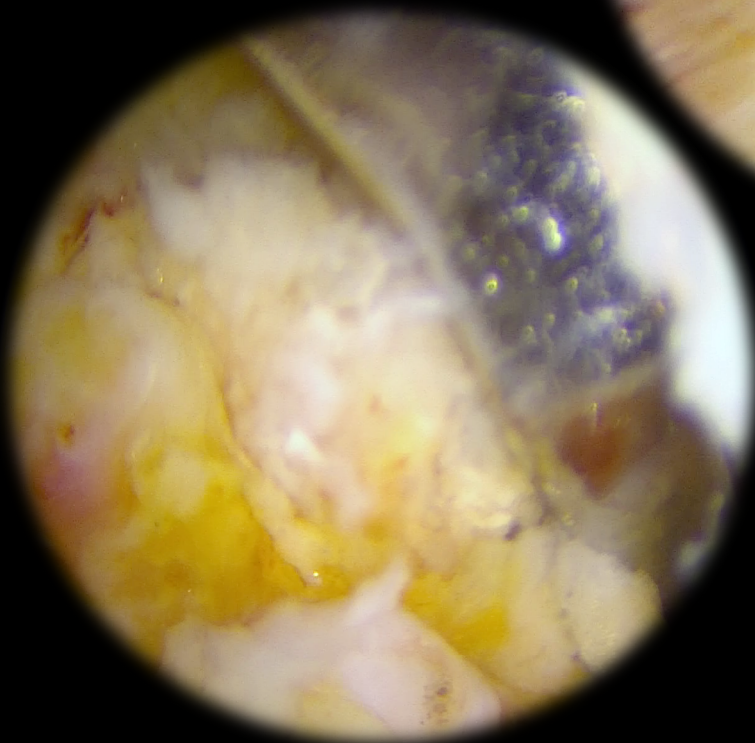
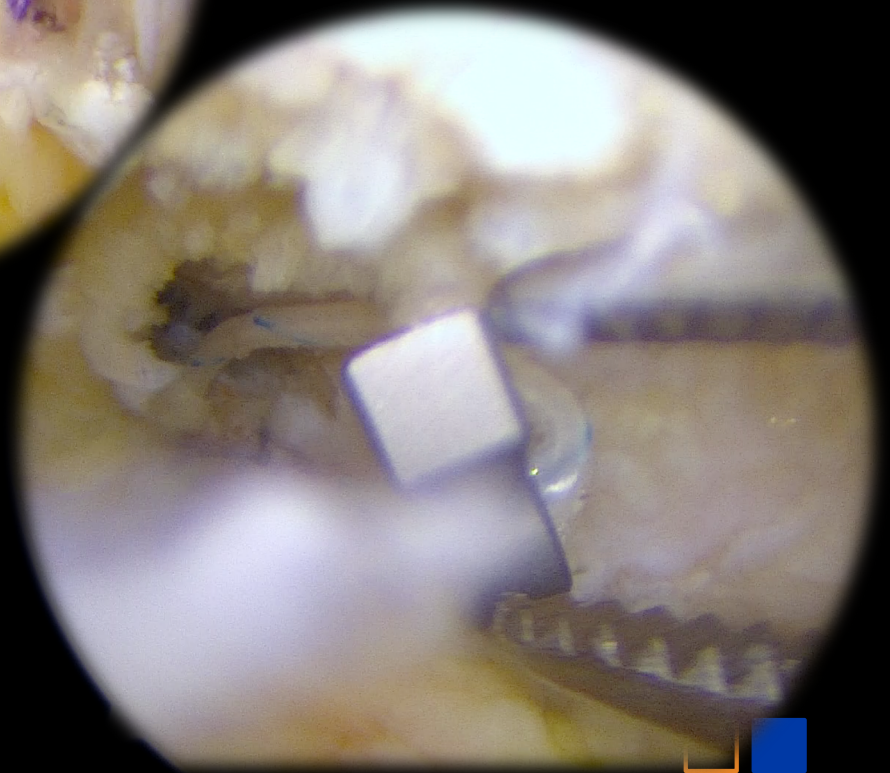
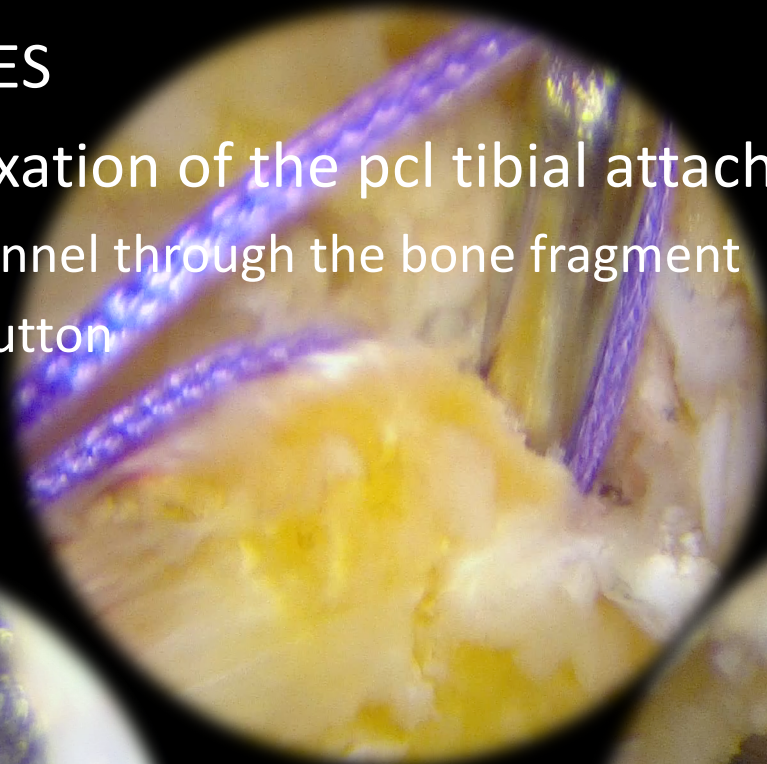
- Check reduction
- Intraarticular associated injuries



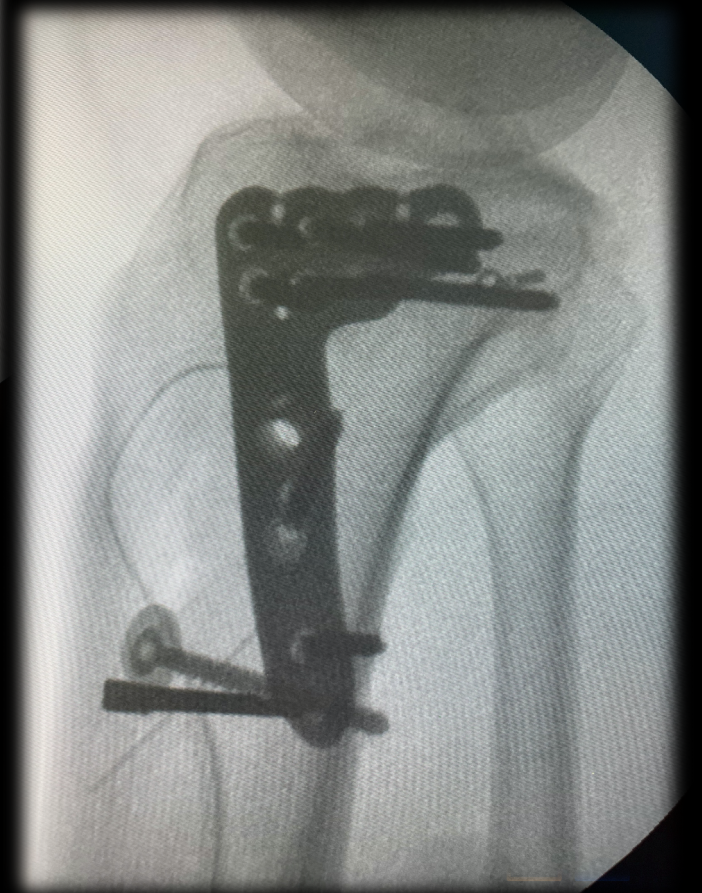
ARTHROSCOPICALLY ASSISTED REPAIR

COMPLEX INJURIES

- Reduction & fixation of the pcl tibial attachment
 - Transtibial tunnel through the bone fragment
 - Adjustable button



ARTHROSCOPICALLY ASSISTED REPAIR



Minimally Invasive Posterior Approach

ISOLATED INJURIES

Minimally Invasive Posterior Approach



PCL Tibial-Sided Avulsion Injuries

OUTCOMES



Management of Posterior Cruciate Ligament Tibial Avulsion Injuries: A Systematic Review

[Perry O Hooper 3rd](#) [Chris Silko](#) [Tennison L Malcolm](#) [Lutul D Farrow](#)

Am J Sports Med. 2018 Mar;46(3):734-42.

Both surgical approaches render **similar outcomes**

✓ Arthroscopy

- higher subjective and objective knee outcome scores but demonstrated a slightly higher rate of arthrofibrosis.
- concomitant intra-articular injuries, such as meniscal tears or osteochondral loose fragments, can be addressed at the time of the index operation.

✓ Open Surgery

- isolated injuries
- less time consuming



PCL Tibial-Sided Avulsion Injuries

TAKE HOME MESSAGE

Depends on surgeon experience

- ✓ **Open Surgery**
 - isolated injuries
- ✓ **Arthroscopically assisted**
 - concomitant intra-articular injuries



Thank you

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