

## Bicondylar Tibial Plateau Fractures

Michael T. Archdeacon, M.D., M.S.E.

Peter J. Stern Professor & Chairman  
Department of Orthopaedic Surgery  
University of Cincinnati Medical Center

November 28, 2017



---

---

---

---

---

---

---

---



66 yo Female

- > S/P High Speed MVA
- > Isolated Injury
- > Closed Fracture
- > Leg Swollen
- > Serous Fx
- > Blisters Noted



---

---

---

---



---

---

---

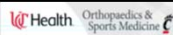
---

### Next Steps?



**POLL OPEN**

1. Immediate ORIF  
0%
2. Non Op Rx  
0%
3. Provisional Reduction & Spanning Ex Fix  
85.71%
4. CT Scan In ED  
14.29%



---

---

---

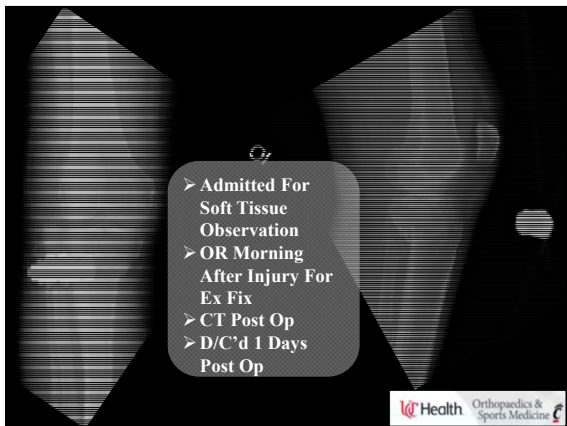
---

---

---

---

---



---

---

---

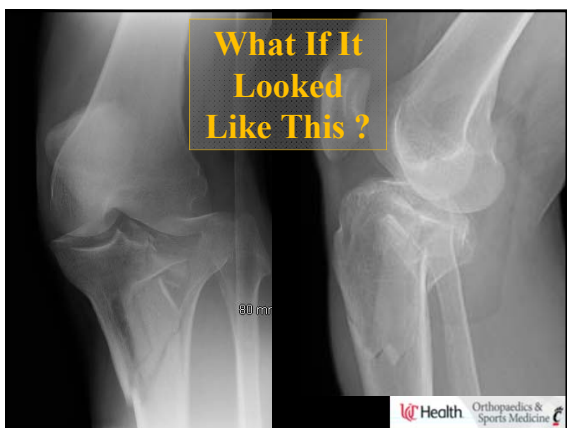
---

---

---

---

---



---

---

---

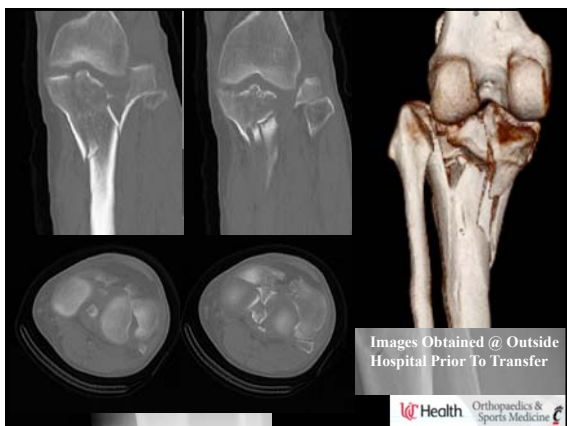
---

---

---

---

---



---

---

---

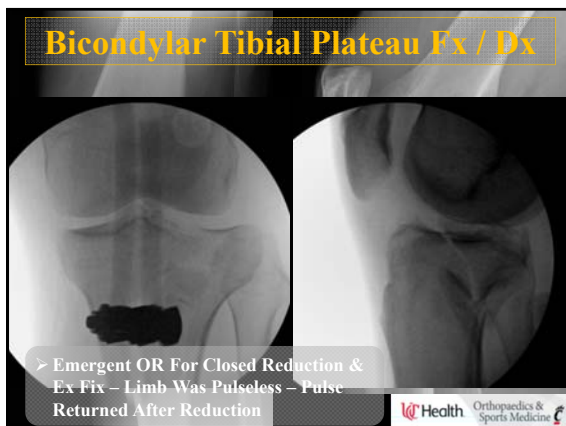
---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

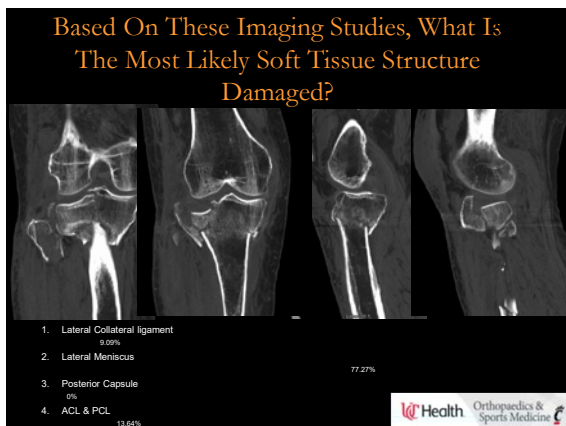
---

---

---

---

---



---

---

---

---


---

---

---

---

**Definitive Treatment:**



1. Subchondral Raft Screws  
0%
2. Posterior Medial Buttress Plate  
0%
3. Anterior Lateral Neutralization Plate  
4%
4. All Of The Above  
96%



---

---

---

---

---

---

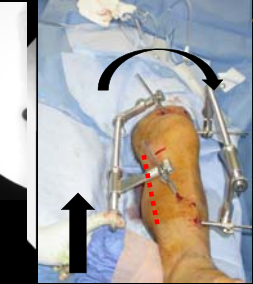
---


---

**Definitive Treatment**

• **Technique Tips – Medial Side**

- ❖ Buttress / Lag Stabilization of Medial Segment
  - Posterior-Medial Approach
    - Tip – Maintain Ex Fix in Extension, Elevate & Externally Rotate Limb, Work From Opposite Side
  - Jungbluth Or Lamina Spreader On Screws Very Helpful
  - Lag Screws
  - Under-Contoured Reconstruction Plate
    - Screws Distal To Proximal





---

---

---

---

---

---


---


---

**Definitive Treatment**

• **Technique Tips – Meniscus Lateral Side**

- ❖ Elevate & Reduce Lateral Split / Depression
  - Sub-Menisal Arthrotomy
  - Femoral Distractor
  - Pass – Through Wires
- ❖ Clamp & Lag Joint
  - Restore Condylar Width
- ❖ Apply Lateral Plate
  - Buttress Technique
  - Subchondral Fixed Angle Screws
  - “Kick-Stand” Screw
  - Non-Locking Shaft Screws





---

---

---

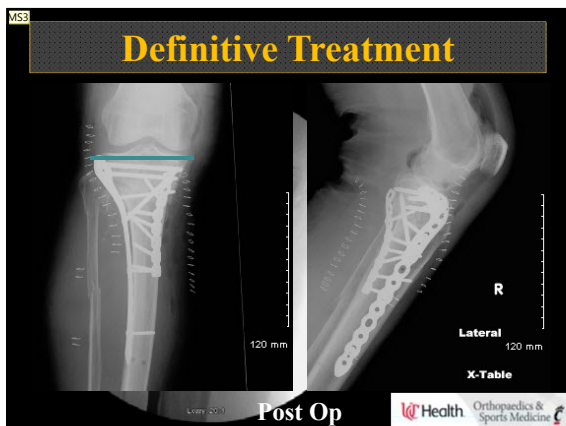
---

---

---

---

---



---

---

---

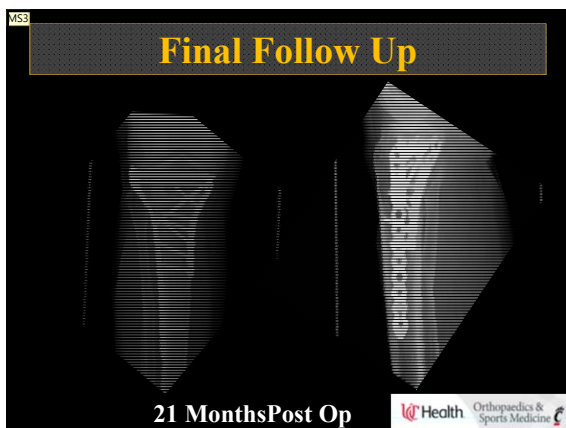
---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

## Slide 13

---

**MS3** AxSOS proximal tibia  
Michael Shapiro, 11/16/2012

## Slide 14

---

**MS3** AxSOS proximal tibia  
Michael Shapiro, 11/16/2012