Supracondylar Femur Fractures - ORIF

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Supracondylar Femur Fx

The Problem

Osteoporosis - Epidemic

Estimated that osteoporosis causes approximately 1.5 million fractures every year in the U.S.
Goals Of Treatment

- Stable Fixation
  - Early Motion
  - Early Weightbearing?
- Minimally Invasive
  - If Possible
- Avoid Complications
  - Stiff Knee
  - Infection
  - Nonunion

Treatment Options

- Ex-Fix
  - Not Common
- IM Nail
  - Distal Femur
  - Last Talk !!!
- Plates
  - Periarticular
  - Locking Hybrid Constructs

Supracondylar Femur Fx: Tips & Tricks – Lateral Position

- Facilitates Exposure & Reduction
- Adipose Tissue “Falls Away”
- Easy Intraoperative Imaging
- Simple To Correct Varus / Valgus Alignment With Bumps
Supracondylar Femur Fx: Tips & Tricks – Approach

- Sub-Vastus Or “Swashbuckler” Extensile Approach
  - Lateral Parapatellar Arthrotomy
  - Extends Proximally Sub-Vastus
  - Starr et al; JOT 1999

Supracondylar Femur Fx: Tips & Tricks – Reduction & Fixation

- Intra-Condylar Reduction
  - Anatomic Reduction Of Joint
  - Lag Screws
    - + / - Cannulated Screws
    - Anterior & Posterior Apices Of Blumenstal’s Triangle

Supracondylar Femur Fx: Tips & Tricks – Reduction & Fixation

- Supra-Condylar Reduction
  - Reduce Articular Segment To Shaft
  - Reduction Plates
  - Locking Plates
  - Anatomic Reduction Versus Bridging Technique
Anatomic Reduction

Bridge Plating

How Long Of A Plate

- Span The Length Of The Bone
**Bone Defects**

- Staged Reconstruction
- Provisional Ex Fix
- Soft Tissue Treatment
- Definitive ORIF
- Dead Space Management
- Defect Reconstruction

**Periprosthetic Fx**

- 6 Months Post Op

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Day Of Injury

- Or Intra Op
- 3 Months Post Op
- 6 Months Post Op
- 13 Months Post Op
How To Deal With Stress Risers

Not Long Enough!

- Overlap Implants
  - Long Implant
- Direct Screws
  - Around Implant?
- Unicortical Screws
  - Control Axial Length & Rotation
- Cables
  - Control Bending Forces

Day Of Injury
Post Op
3 Months Post Op
4 Months Post Op
Post Op
#23 Months Post Op
#2

Thank You