EXTENDED TROCHANTERIC OSTEOTOMY
IN REVISION TOTAL HIP ARTHROPLASTY

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EXTENDED TROCHANTERIC OSTEOTOMY

- Osteotomy of lateral 1/3 to 1/2 of proximal femur
- Direct diaphyseal visualization
  - Revisions easier
  - Revisions safer
  - Surgical efficiency
- Reliable healing - greater than 90% union

Miner, Momberger, Chong, Paprovsky: “The Extended Trochanteric Osteotomy in Revision THR” J.Arthroplasty 2001
EXTENDED TROCHANTERIC OSTEOTOMY

**Indications**

- Femoral component removal
  - Fully porous coated stem
  - Extensively coated taper stem
  - Cemented stems with long distal cement mantle
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Indications

• Varus femoral remodeling / deformity

• Direct view of diaphysis

• Concentric reaming distally, avoid under sizing

• Minimize cortical perforation, fracture
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**Indications**

- Improved acetabular exposure
- Vancouver B2 and B3 fractures
- Increased abductor tension
- Protects abductors during exposure
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Infection:

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Pre Op Planning: How long to make the osteotomy

- Long enough to get femoral component out
- Short enough to get distal fixation with revision component
- Near apex of femoral bow (varus correction)
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When To Do It?

- After dislocation, before stem removal
- After dislocation, after stem removal
- Before dislocation: In-Situ
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**Surgical Technique**

- Posterior approach
- Elevate vastus lateralis
- Measure length of osteotomy
- Maintain soft tissue attachment to trochanteric fragment
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**Surgical Technique**

- Posterior limb cut: sagittal saw vs pencil tip burr
- Begin anterior limb cut both proximally and distally
- Elevate troch fragment as one piece with multiple broad osteotomes
- Release anterior capsule after osteotomy hinges open
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Surgical Technique

- Support vastus ridge (often fractures here)
- Prophylactic cerclage cable to protect intact distal diaphysis
- Fix with cables, not cerclage wires
- Advance fragment posteriorly
- Tighten distal to proximal
EXTENDED TROCHANTERIC OSTEOTOMY

Post Op Considerations

• Weight bearing precautions

• Abductor precautions

• Mean time to union = 10.3 months

• Repaired ETO reduces torsional strength by 73%
  (Noble, Branham, Willis, et al “Mechanical Effects of the Extended Trochanteric Osteotomy” JBJS, 2005)
EXTENDED TROCHANTERIC OSTEOOTOMY
Case Example
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Case Example
THANK YOU

RLO

26 Years