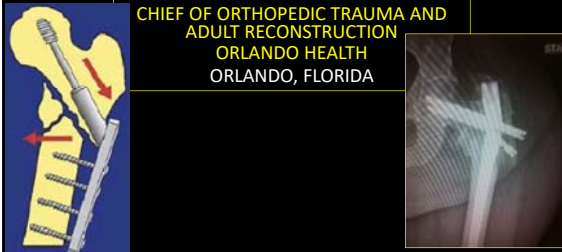


### THE REVERSE OBLIQUITY FRACTURE CASES

GEORGE HAIDUKEWYCH M.D.  
CHIEF OF ORTHOPEDIC TRAUMA AND  
ADULT RECONSTRUCTION  
ORLANDO HEALTH  
ORLANDO, FLORIDA



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### DISCLOSURES

- REVISION TECHNOLOGIES, LLC. STOCK
- ROYALTIES BIOMET, DEPUY
- CONSULTANT, DEPUY, SYNTHES, AND BIOMET

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### 68 MALE S/P FALL CAD, HTN NO HIP PAIN PRE FALL

POLL OPEN

1. ORIF WITH DHS  0%
2. ORIF WITH PROXIMAL FEMORAL LOCKING PLATE  0%
3. ORIF WITH DHS WITH TROCHANTERIC STABILIZING PLATE  0%
4. CEPHALOMEDULLARY NAILING  0%



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POLL OPEN

### LOCKING OPTIONS

1. LONG NAIL LOCKED 0%
2. LONG NAIL NOT LOCKED 0%
3. SHORT NAIL LOCKED 0%
4. SHORT NAIL NOT LOCKED 0%



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### REVERSE OBLIQUITY FRACTURES OF THE INTERTROCHANTERIC REGION OF THE FEMUR

JBJS-Am 2001

BY GEORGE I. HAIIDUKENYCH, MD, T. ANDREW ISRAEL, MD, AND DANIEL I. BERRY, MD

- Reverse Obliquity
  - Fracture in Lateral Cortex
  - Loss of Lateral Buttress
  - Loss of Resistance to Medial Shaft Displacement



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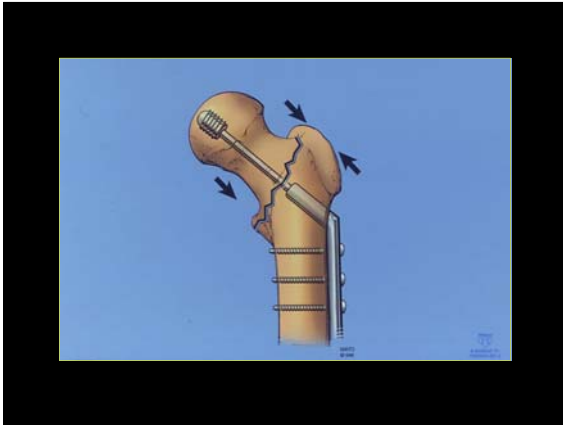
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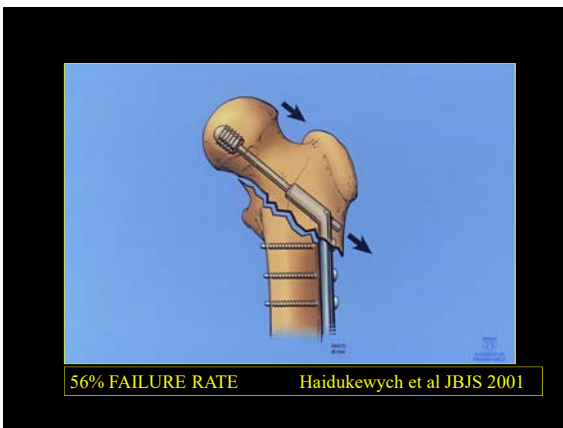
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56% FAILURE RATE Haidukewych et al JBJS 2001

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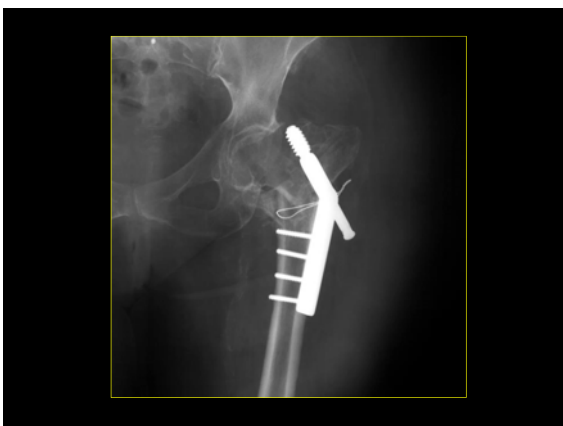
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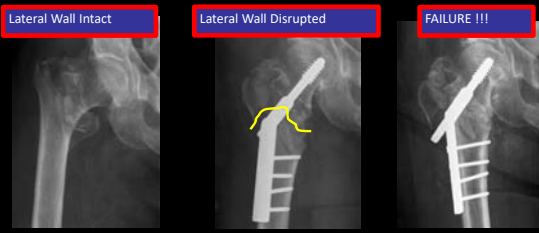
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**Integrity of the Lateral Femoral Wall in Intertrochanteric Hip Fractures: An Important Predictor of a Reoperation**

JBJS-Am 2007

By Henrik Palm, MD, Steffen Jacobsen, MD, Stig Sonne-Holm, MD, DMSc, and Peter Gebuhr, MD, on behalf of the Hip Fracture Study Group

**Lateral Wall Intact**      **Lateral Wall Disrupted**      **FAILURE !!!**



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THE BONE & JOINT JOURNAL

■ TRAUMA

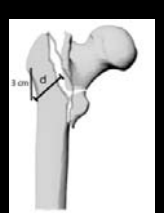
**Lateral femoral wall thickness**

A RELIABLE PREDICTOR OF POST-OPERATIVE LATERAL WALL FRACTURE IN INTERTROCHANTERIC FRACTURES

Bone Joint J 2013;95-8:1134-8.

C.E. Hsu,  
C.M. Shih,  
C.C. Wang,  
K.C. Huang

- 208 patients
- T.A.D. ~18mm
- Failures / Re-operation Rates
- $d < 20.5\text{mm} \rightarrow$  No SHS



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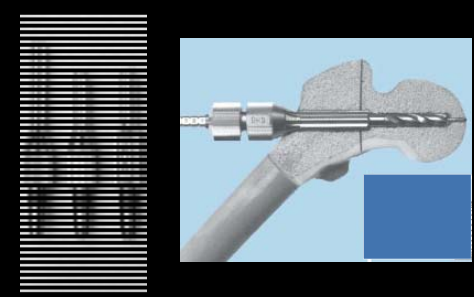
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**Weapon of Mass Destruction**



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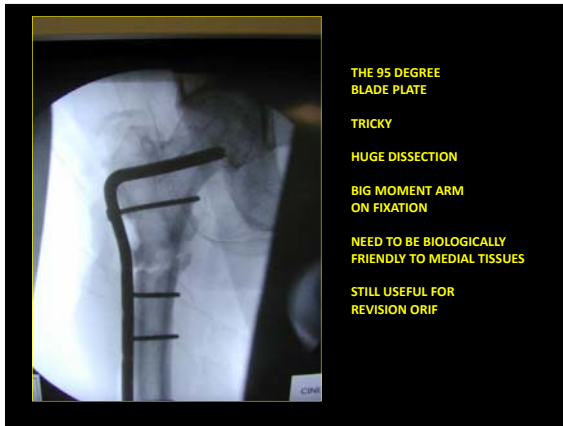
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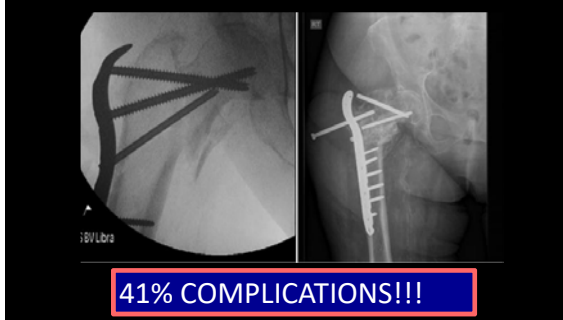
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### Short-Term Follow-Up of Pertrochanteric Fractures Treated Using the Proximal Femoral Locking Plate

*(J Orthop Trauma 2014;28:283-287)*  
Benjamin Johnson, MBBS, Jonathan Stevenson, MBBS, Ramsey Chamma, MBBS, Amit Patel, MBBS, Shin-Jae Rhee, MBBS, Caroline Lever, MBBS, Ian Starks, FRCS, MBBS, and Phillip J. Roberts, MA



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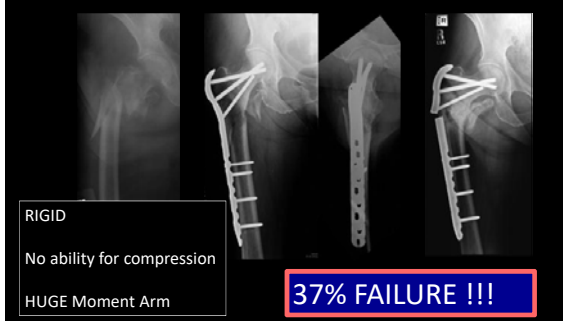
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### Mechanical Failure After Locking Plate Fixation of Unstable Intertrochanteric Femur Fractures

*(J Orthop Trauma 2013;27:22-28)*  
Phillip N. Streubel, MD, Michael J. Moustoukas, MD, and William T. Obrebsky, MD, MPH



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**CASE 2** POLL OPEN

**FIXATION:**

- 1. DHS 0%
- 2. TSP 0%
- 3. LOCKING 0%
- 4. PLATE 0%
- 5. IM NAIL 0%



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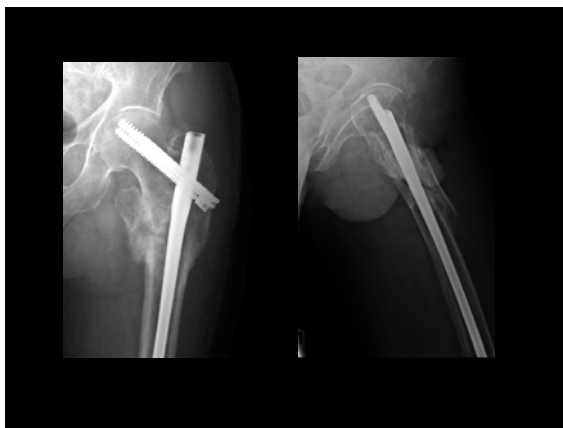
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**TIPS AND TRICKS**

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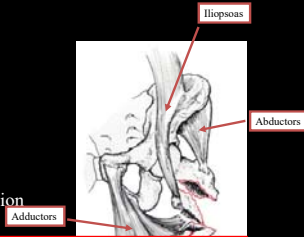
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### Deforming Forces – R.O. & S.T.

- Proximal Fragment
  - Abduction
  - ± Flexion / ER
- Distal Fragment
  - Adduction and Flexion



AP fluoro on Fx Table:  
"Over-the-top";  
Accommodate for ER of proximal fragment

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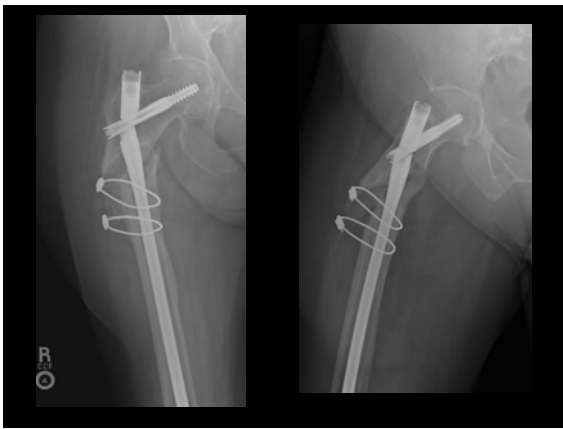
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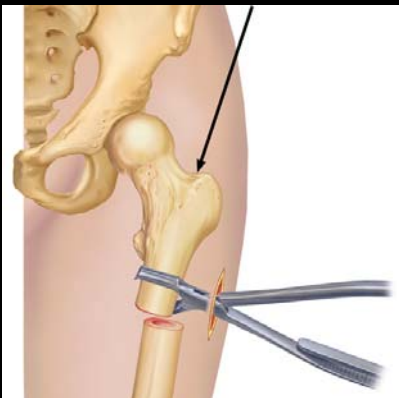
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**Clamp-Assisted Reduction of High Subtrochanteric Fractures of the Femur**

Alan Afari, Frank Liporace, Eric Lindvall, Anthony Infante, Jr., Henry C. Sagi and George J. Haidukewych  
*J Bone Joint Surg Am.* 2009;91:1913-1918. doi:10.2106/JBJS.H.01563



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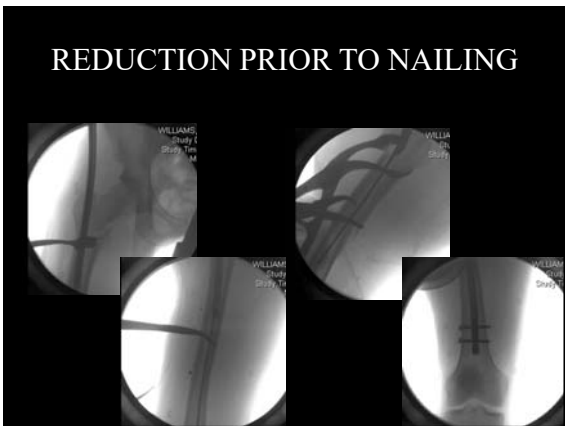
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### TAKE HOME POINTS

- RECOGNIZE REVERSE OBLIQUITY
- DON'T CREATE LATERAL WALL DEFECTS
- NAIL THESE FRACTURES
- REDUCE WELL, IMPLANT ACCURATELY

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THANK YOU

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