


**TALUS
FRACTURES**

ROY SANDERS, M.D.
Chairman | USF Dept. of Orthopedics
President | Florida Orthopaedic Institute
Chief | Orthopaedics | Tampa General
Editor-in-Chief | J. Ortho. Trauma



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**AS A DESIGNING SURGEON,
I RECEIVE ROYALTIES:**

- A.L.P.S. SYSTEM - ZIMMER - BIOMET
- POLYAXIAL PLATES - ZIMMER - BIOMET
- SONIC PIN - STRYKER
- TRIGEN NAILS - SMITH & NEPHEW
- INTERTAN NAIL - SMITH & NEPHEW
- BIONX SCREWS - CONMED/LINVATEC

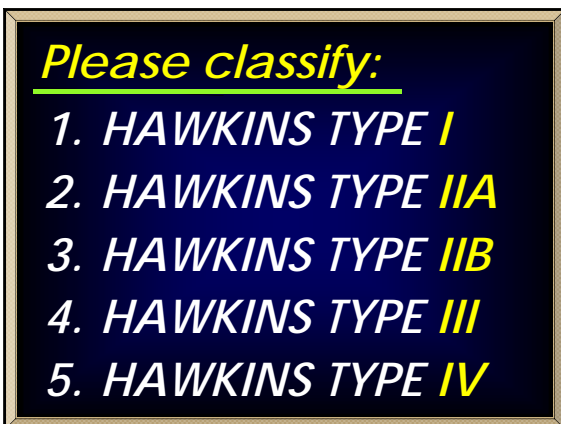
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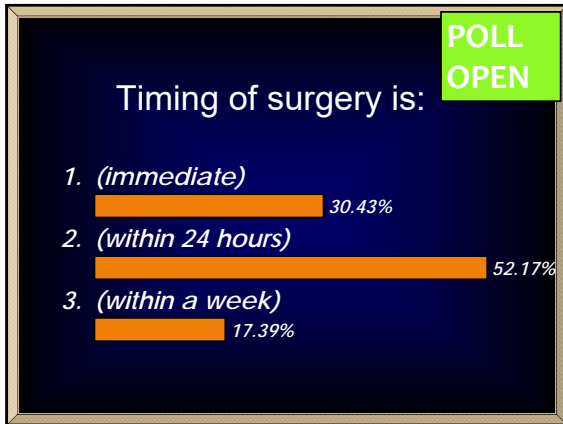
CASE # 1

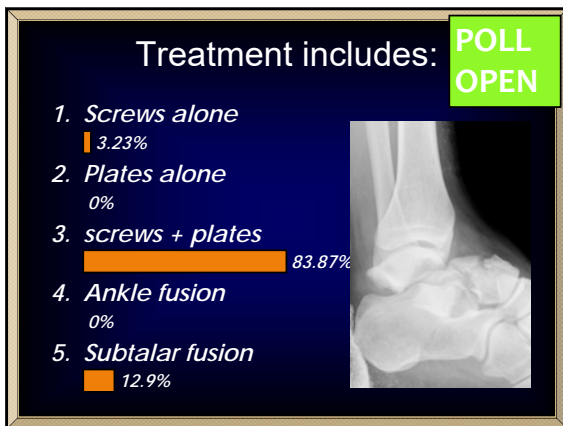
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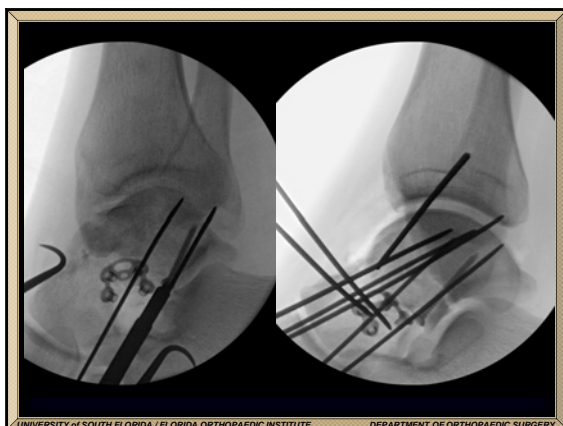


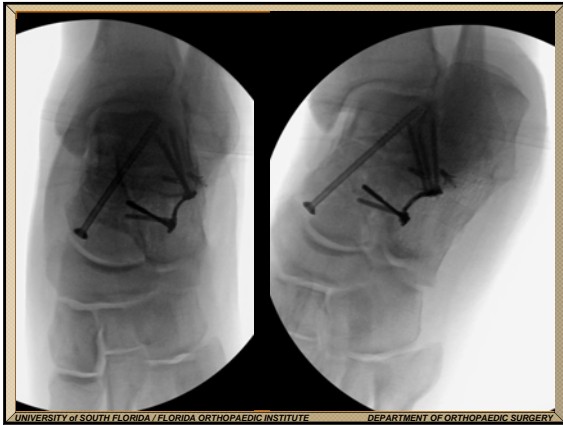


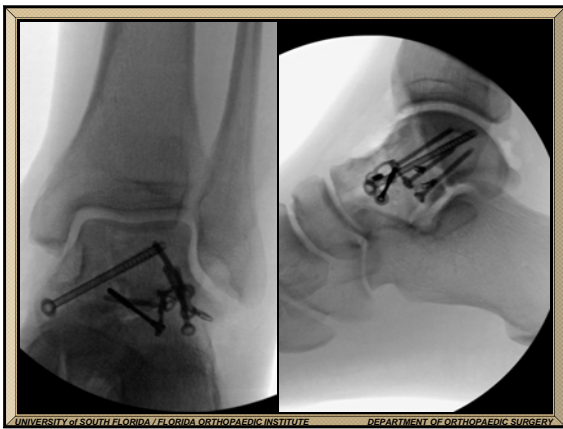


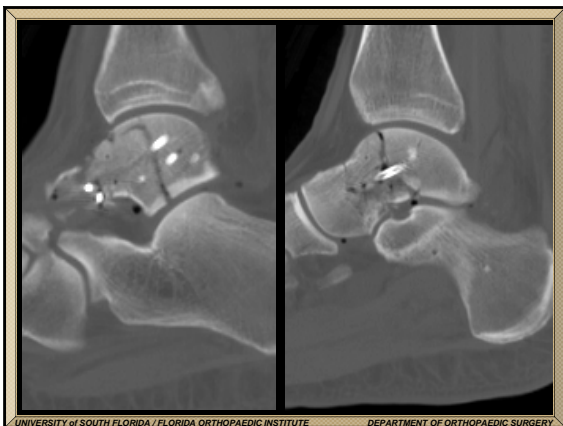


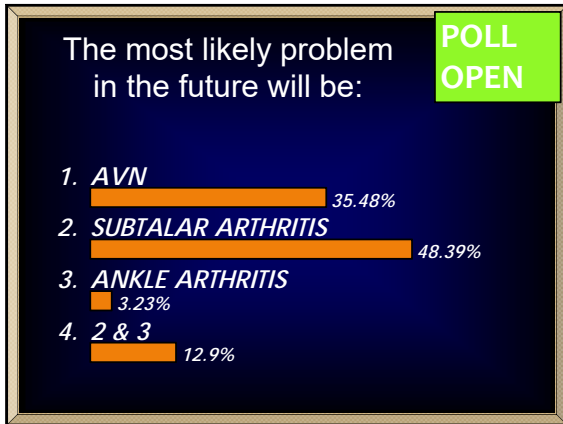












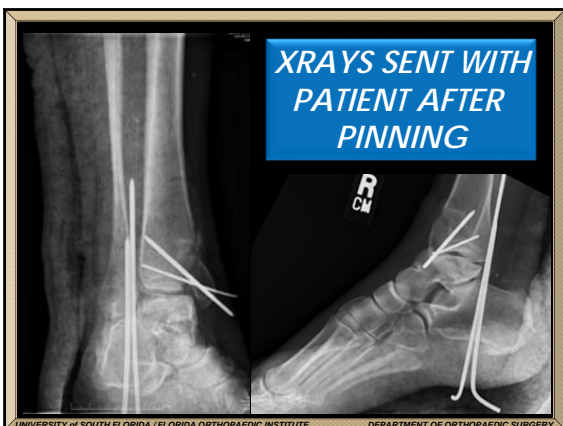


CASE # 2

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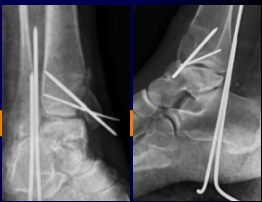




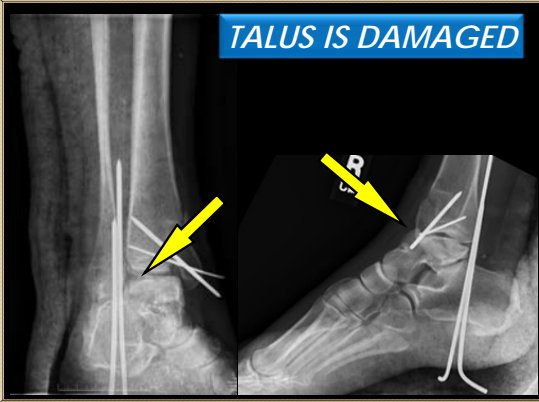
Based on these Xrays, your next step is:

POLL OPEN

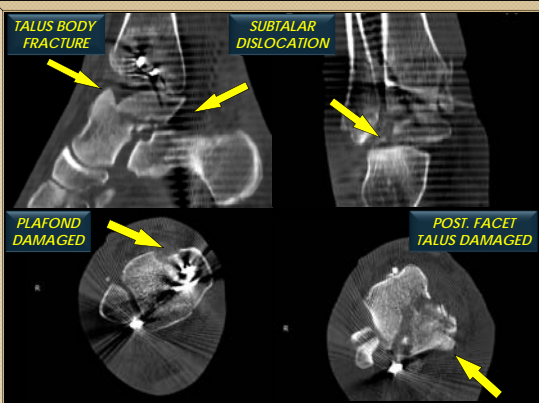
1. LEAVE ALONE & LET IT HEAL
0%
2. OBTAIN CT SCAN
3. REVISE ANKLE ORIF
0%
4. REVISE TO A PRIMARY FUSION
0%



TALUS IS DAMAGED

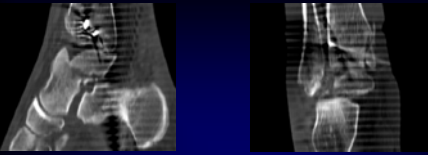


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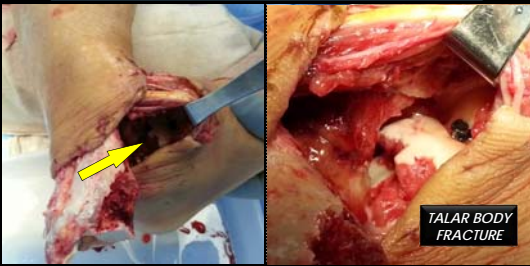
POLL OPEN



With this information you would:

1. STILL LEAVE ALONE TO HEAL
0%
2. REVISION TIBIA & FIBULA
0%
3. LEAVE PINS AND FIX TALUS
3.65%
4. REVISE TIBIA & FIBULA & FIX TALUS
76.92%
5. FUSE SUBTALAR JOINT & ANKLE (TTC)
19.23%

REMOVE PINS, DISLOCATE, IRRIGATION & DEBRIDEMENT EXPLORATION

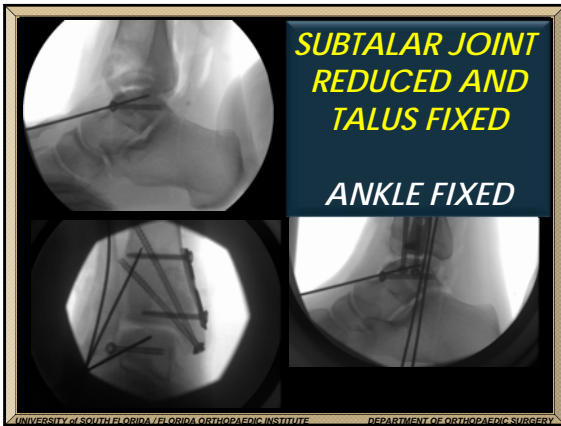


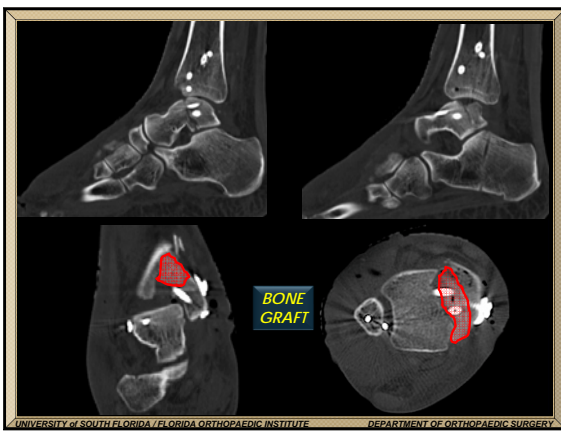
TALAR BODY FRACTURE

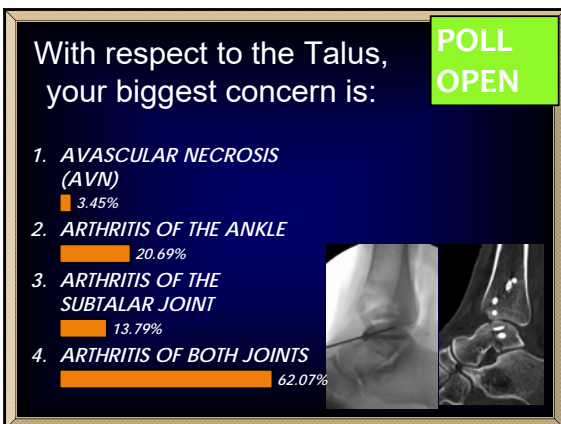
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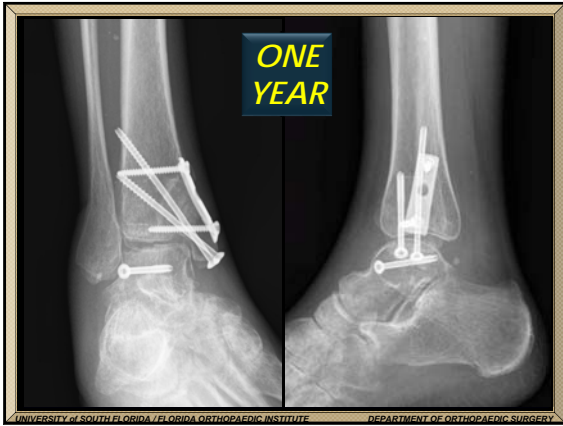


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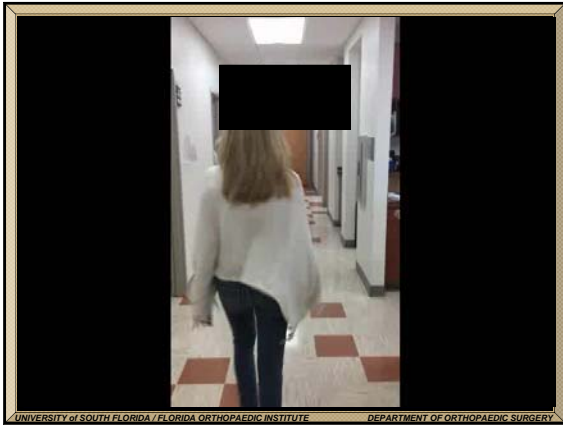
Based on these X-Rays, you would:

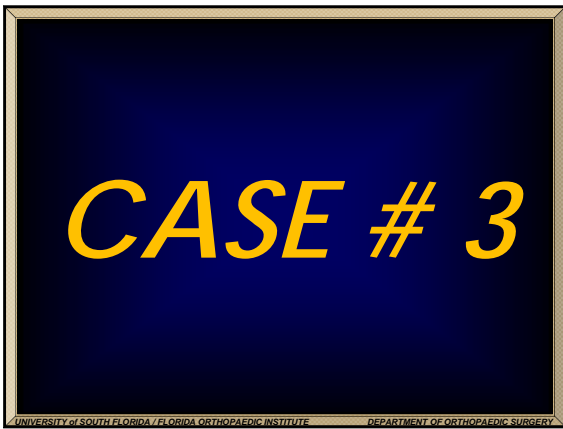
POLL OPEN

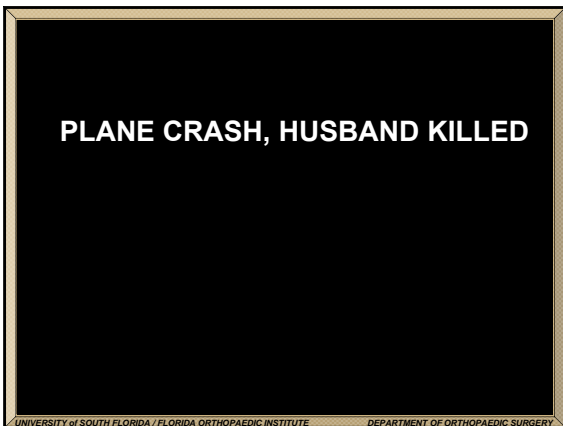
1. PRP OR VISCO INJECTION
7.14%
2. FUSE ANKLE ALONE
42.86%
3. FUSE ANKLE & SUBTALAR JOINT
28.57%
4. PERFORM A TOTAL ANKLE
21.43%

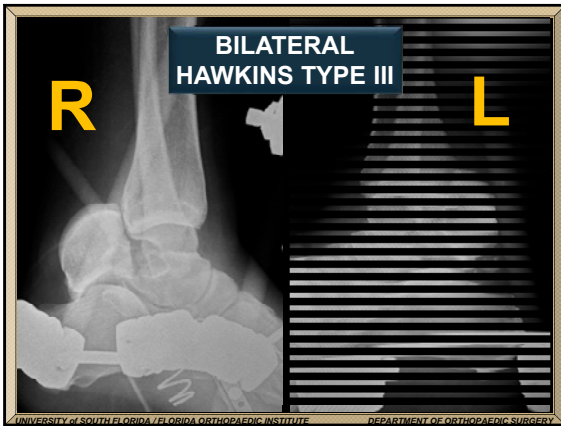
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This block contains a poll question based on the X-rays. The question is "Based on these X-Rays, you would:" followed by a green box labeled "POLL OPEN". There are four options with corresponding percentages: 1. PRP OR VISCO INJECTION (7.14%), 2. FUSE ANKLE ALONE (42.86%), 3. FUSE ANKLE & SUBTALAR JOINT (28.57%), and 4. PERFORM A TOTAL ANKLE (21.43%). To the right of the poll is a small inset image showing two views of the ankle joint. At the bottom, the text "UNIVERSITY OF SOUTH FLORIDA / FLORIDA ORTHOPAEDIC INSTITUTE DEPARTMENT OF ORTHOPAEDIC SURGERY" is visible.





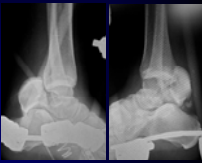




She comes into your office. She has been in ex fixes for 5 weeks. You would:

POLL OPEN

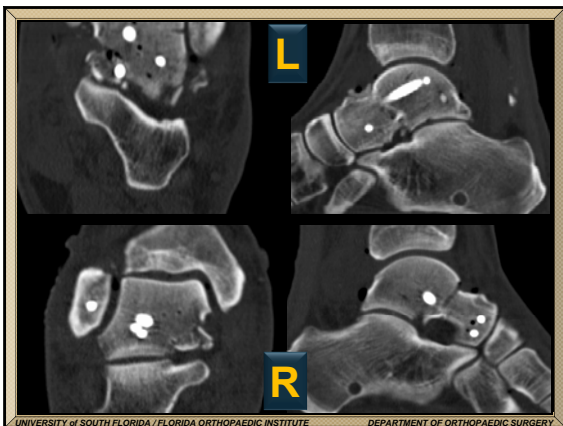
1. LEAVE ALONE - TOO LATE TO FIX
0%
2. ORIF BOTH TALI & HOPE FOR THE BEST
68%
3. PERFORM BILATERAL TTC FUSIONS
24%
4. PERFORM BILATERAL TALECTOMIES
8%







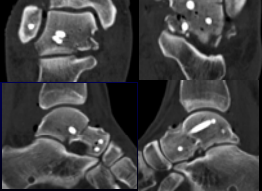




Based on these post op CT scans you would tell the patient to expect:

POLL OPEN

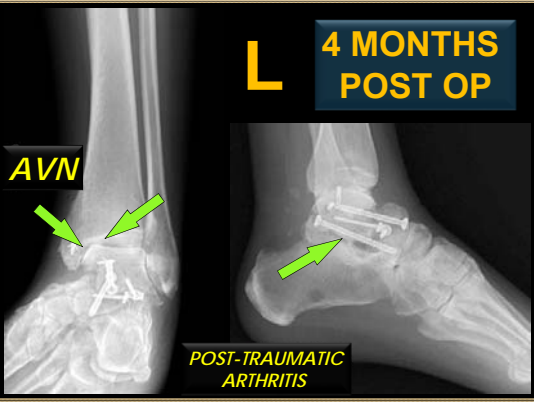
1. TALAR NECK NONUNION 8%
2. SUBTALAR ARTHRITIS 8%
3. AVN OF THE TALUS 12%
4. ALL OF THE ABOVE 72%



L 4 MONTHS POST OP

AVN

POST-TRAUMATIC ARTHRITIS

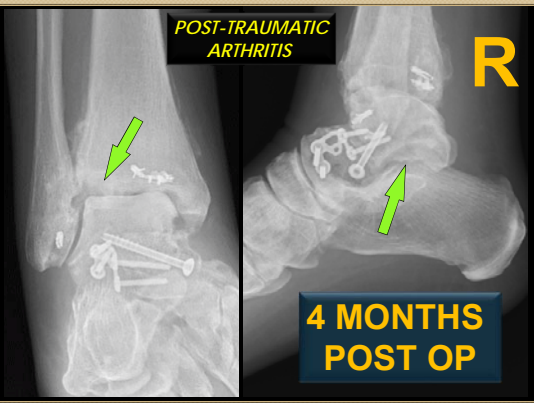


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POST-TRAUMATIC ARTHRITIS


R

4 MONTHS POST OP



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AVASCULAR NECROSIS INCREASES WITH HAWKINS TYPE.



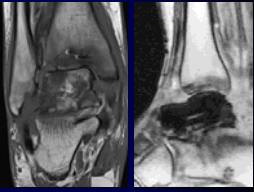
IN TYPE III, THE RATE OF AVN IS:

| | |
|--------------------|---------------------|
| 1. 0 - 25% | 3. 51 - 75% |
| 2. 26 - 50% | 4. 76 - 100% |

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She comes back 2 years later in pain, and these are her scans. You suggest:

POLL OPEN



1. NOTHING - YOU CAN'T HELP HER
0%
2. BILATERAL TOTAL ANKLE REPLACEMENTS
4%
3. BILATERAL TALECTOMIES
8%
4. BILATERAL TIBIO-TALO-CALCANEAL (TTC) FUSIONS
88%

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2 YEARS LATER

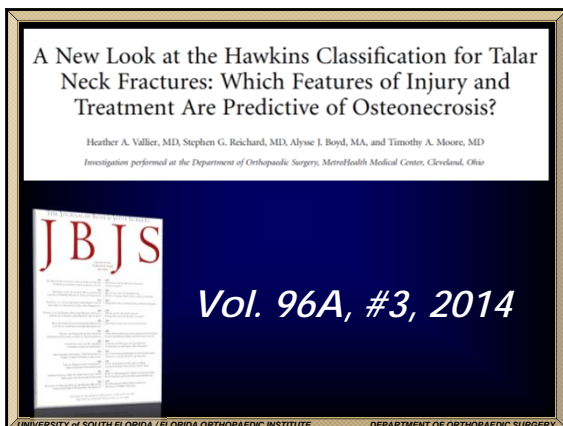


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PEARLS OF TREATMENT - TALUS

1. CLASSIFICATION
2. TIME TO FIXATION

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**OPEN REDUCTION AND STABLE
FIXATION OF ISOLATED, DISPLACED
TALAR NECK AND BODY FRACTURES**

By ERIC LINDVALL, DO, GEORGE HAJDUKOWYCH, MD, THOMAS DI PASQUALE, DO,
DOLY HERSCOVICI JR., DO, AND ROY SANDERS, MD
Investigation performed at the Florida Orthopaedic Institute, Tampa, Florida

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**TIME TO FIXATION
HAWKINS FRACTURES**

12 < 6 HOURS

14 8 - 504 HOURS

26 FRACTURES

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AVN RATE 50%

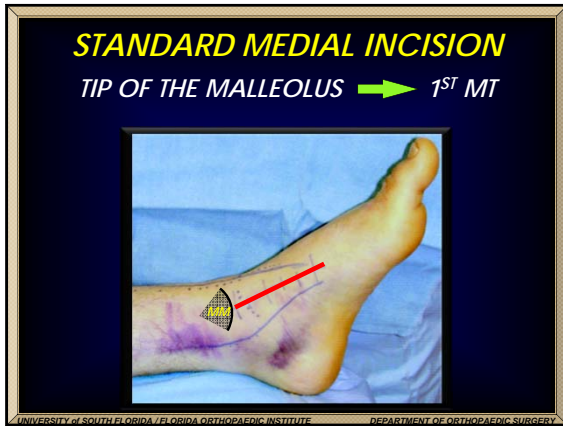
*NOT
RELATED TO
TIMING OF FIXATION*

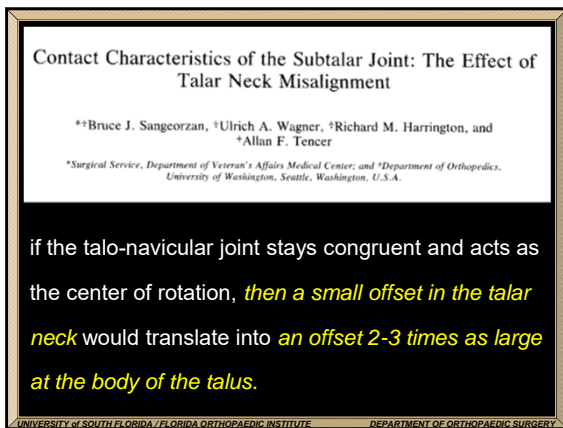
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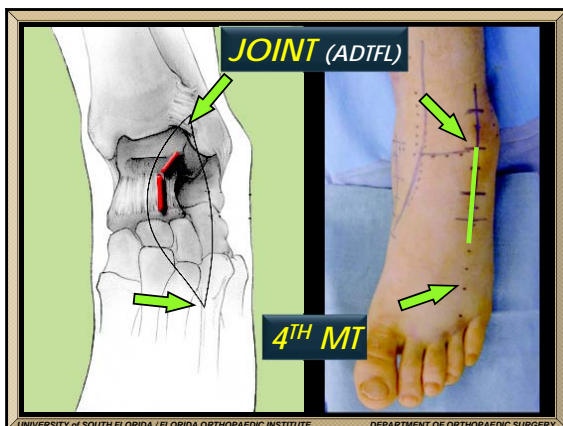
PEARLS OF TREATMENT - TALUS

- 1. CLASSIFICATION*
- 2. TIME TO FIXATION*
- 3. INCISIONS*

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PEARLS OF TREATMENT - TALUS

1. CLASSIFICATION
2. TIME TO FIXATION
3. INCISIONS
4. FIXATION

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Plate Fixation of Talar Neck Fractures: Preliminary Review of a New Technique in Twenty-three Patients

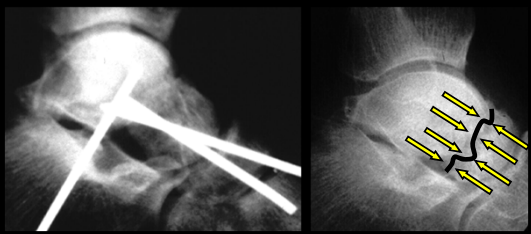
P. B. Fleuriat Chateau, *D. S. Brokaw, *B. A. Jelen, *D. K. Scheid, and *T. G. Weber
Department of Orthopaedics, Montfort Hospital, Ottawa, Canada; *Indiana University School of Medicine, and Orthopaedics Indianapolis, Methodist Hospital, Indianapolis, Indiana, U.S.A.



Volume 16, No. 4, 2002

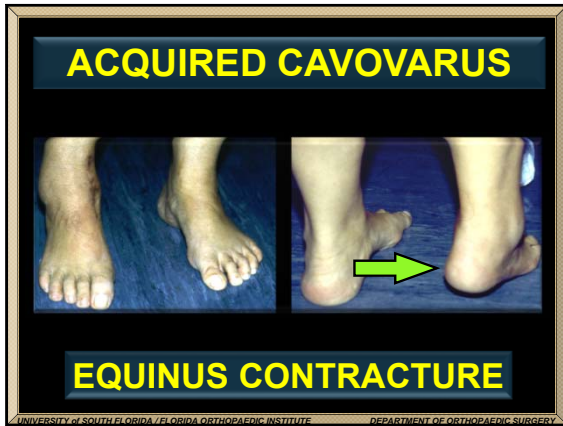
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**63 YEAR OLD FEMALE
IN MVA**



MALREDUCTION WITH SHORT NECK

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PEARLS OF TREATMENT - TALUS

1. CLASSIFICATION
2. TIME TO FIXATION
3. INCISIONS
4. FIXATION
5. OUTCOMES

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PEARLS OF TREATMENT - TALUS

1. TIME TO FIXATION
2. INCISIONS
3. FIXATION
4. OUTCOMES

**TALAR NECK FRACTURES:
RESULTS AND OUTCOMES**

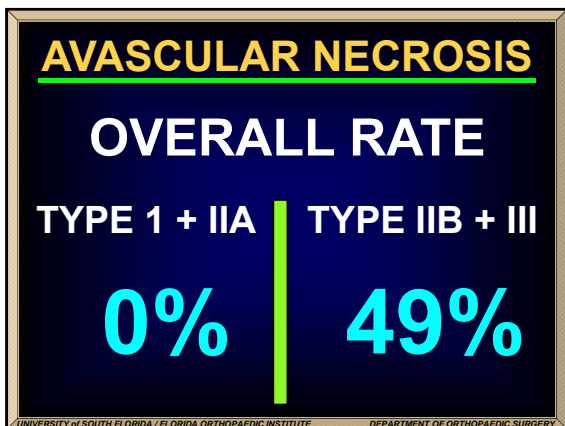
BY HEATHER A. VALLIER, MD, SEAN E. NORK, MD, DAVID P. BAREL, MD,
STEPHEN K. BENIRSCHKE, MD, AND BRUCE I. SANGEORZAN, MD

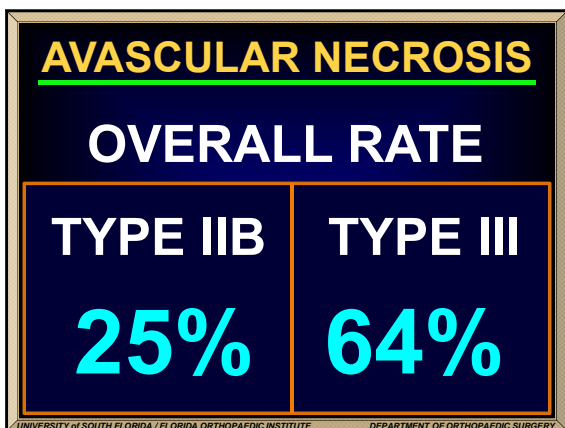
Investigation performed at Harborview Medical Center, Seattle, Washington

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**WORSE OUTCOMES
ASSOCIATED WITH**

**NECK COMMINATION
&
OPEN FRACTURES**

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Functional Outcomes Following Displaced Talar Neck Fractures

David W. Sanders, MD, MSc, FRCS(C), Matthew Busam, MD,† Emily Hattwick, MD,‡ John R. Edwards, MD,‡ Mark P. McAndrew, MD,‡ and Kenneth D. Johnson, MD§*



VOLUME 18, pp. 265-270, 2004

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Results: Mean Short Musculoskeletal Function Assessment score was 20 ± 18 out of 100, with a lower score indicative of better outcome; mean Ankle Osteoarthritis Scale score was 3.8 ± 2.4 out of 10 (lower score better); and mean Ankle Society Ankle-Hindfoot Score was 71 ± 19 out of 100 points (higher score better). The incidence of secondary reconstructive surgery increased from $24 \pm 5\%$ at 1 year to $48 \pm 10\%$ at 10 years postinjury.

RECONSTRUCTIVE SURGERY

| | |
|------------------------|------------|
| WITHIN 1 YEAR | 24% |
| WITHIN 10 YEARS | 50% |

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TALAR NECK FRACTURES CONCLUSIONS

- 1. TYPE IIB CHANGES PROGNOSIS**
- 2. TIMING: URGENT NOT EMERGENT**
- 3. INCISIONS: MEDIAL & LATERAL**
- 4. COMMINUTION: LATERAL PLATE**
- 5. AVN RATE: HIGH FOR TYPE IIB/III**

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