

**LISFRANC INJURIES IN THE ATHLETE:
FIX OR FUZE?**

SCOTT SWANSON, M.D.



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DISCLOSURES

● NONE

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A.R.S.

WHAT DO THESE OBJECTS HAVE IN COMMON?



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ANSWER:

ALL ARE RUMORED TO EXIST,
BUT ONLY PROOF ARE A FEW
GRAINY PHOTOS & DRUNKEN
EYE WITNESS ACCOUNTS


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DURING "HEADBANGER'S BALL PARTY"
ROY SANDERS DISAPPEARS.

HE CAN BE FOUND:

- A. SMOKING POT W/ NEIGHBORS
- B. IN BEDROOM W/ YOUR WIFE
- C. VOMITING ON THE FRONT PORCH
- D. PLAYING GUITAR HERO W/ KETZ




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WIDE SPECTRUM

LISFRANC INJURIES

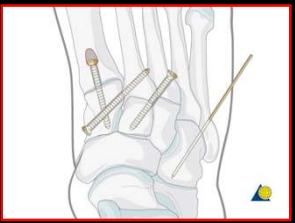


- LOW ENERGY
- "SPRAIN"
- LITTLE DIASTASIS
- MOST IN ATHLETES
- FIX?

- HIGHER ENERGY (CRUSH)
- INTRA-ARTICULAR FRACTURES
- SIGNIFICANT DIASTASIS
- FUSE?

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GOLD STANDARD?



SCREW BREAKAGE, HWR, ARTHRITIS, OUTCOMES?

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TREATMENT OF PRIMARILY LIGAMENTOUS LISFRANC JOINT INJURIES: PRIMARY ARTHRODESIS COMPARED WITH OPEN REDUCTION AND INTERNAL FIXATION

A PROSPECTIVE, RANDOMIZED STUDY
By THUAN V. LI, MD, AND J. CHRIS COETZEE, MD, FRCSC
Investigation performed at the Department of Orthopaedic Surgery, University of Minnesota, Minneapolis, Minnesota

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FIX OR FUZE: CONSIDERATIONS

- INJURY TYPE, SEVERITY & ENERGY
- ATHLETE SIZE, POSITION
- EXPECTATIONS, PATIENCE
- CASE BY CASE

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ATHLETES ARE DIFFERENT

- SPEED OF RETURN TO PLAY IS #1
- CANNOT/WILL NOT BE NWB FOR VERY LONG
- VERY RESISTANT TO FUSIONS
- OFTEN TREATING COACHES, FOLKS, TRAINERS, AGENTS, ETC.

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CASE #1

21 Y/O D1 BASEBALL PLAYER
● INJURES FOOT RUNNING INTO
OUTFIELD WALL
● MEDIAL MIDFOOT PAIN, SWELLING,
NO BRUISING

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TREATMENT?

A. SUTURE BUTTON
B. PERC SCREW(S)
C. ORIF
D. BRIDGE PLATE
E. FUUSE
F. DO NOTHING

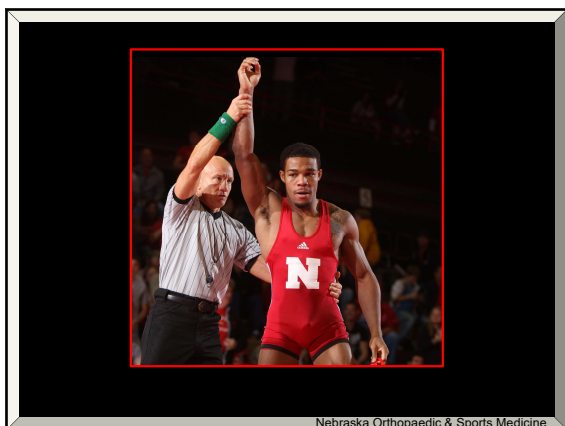
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CASE #1

- DECLINED TREATMENT
- 5 YEAR MLB CAREER
- CURRENTLY IN MINORS
- LONG TERM PROGNOSIS?

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CASE #2

- 17 Y/O INJURED PLAYING FOOTBALL
- X-RAYS "NEGATIVE"
- PERSISTENT PAIN, BUT RETURNS TO PLAY & FINISHES SEASON
- TOP RANKED WRESTLER IN STATE

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TREATMENT?

- A. SUTURE BUTTON
- B. PERC SCREW(S)
- C. ORIF
- D. BRIDGE PLATE
- E. FUUSE
- F. WRESTLE

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CASE #3

- 19 Y/O VOLLEYBALL PLAYER
- TOP RATED HIGH SCHOOL SETTER
- VOLLEYBALL INJURY
- MIDFOOT SWELLING AND TENDERNESS

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CASE #3, cont.

- 6 WKS NWB (2 SPLINT, 4 BOOT)
- WBAT @ 6 WKS
- RTP 3-6 MOS
- ALL-AMERICAN, CAPTAIN, TWO TIME NATIONAL CHAMPION

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SUTURE BUTTON

- I LIKE IT AND I USE IT
- \$\$, BUT EASY TO DO & SELL
- "LIGAMENT RECONSTRUCTION"
- NO HWR, NO SCREW BREAKAGE
- OPEN OR PERCUTANEOUS
- MY TREATMENT OF CHOICE

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CASE #4

- 18 Y/O INTERIOR LINEMAN FOR SMALL COLLEGE FOOTBALL TEAM
- FOOT INJURY IN PRACTICE
- WANTS TO KEEP PLAYING, BUT NOT "LIFE OR DEATH" SITUATION

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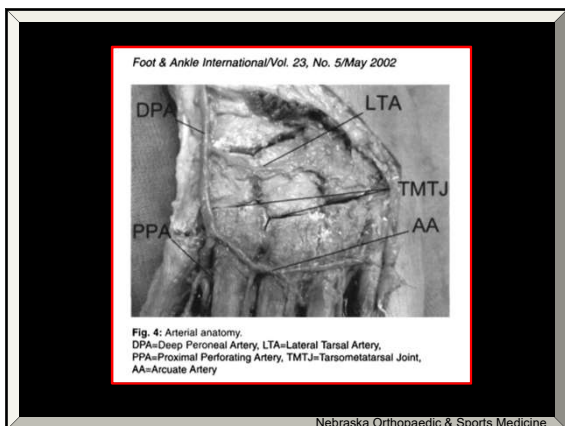
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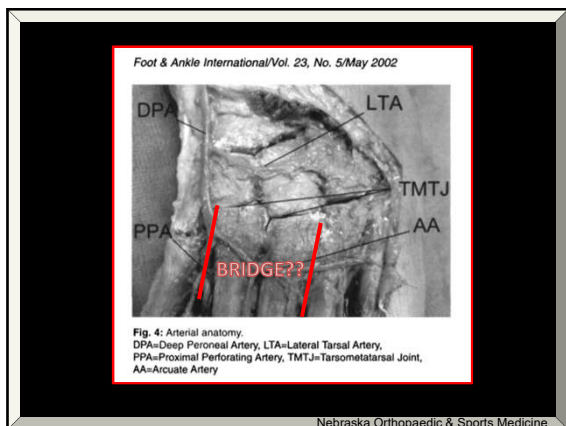


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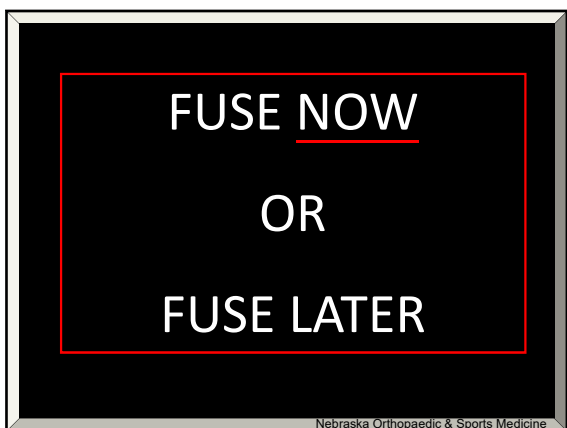
CASE #5

- 52 Y/O FEMALE
- NOT AN ATHLETE
- FALL DOWN STAIRS

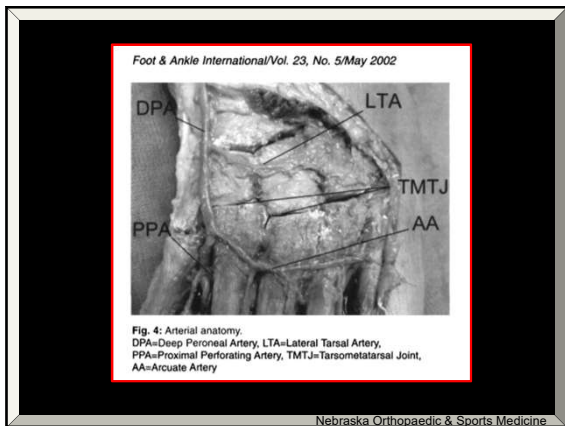
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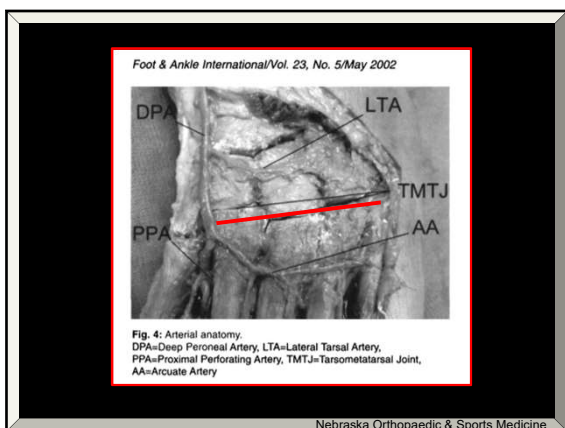




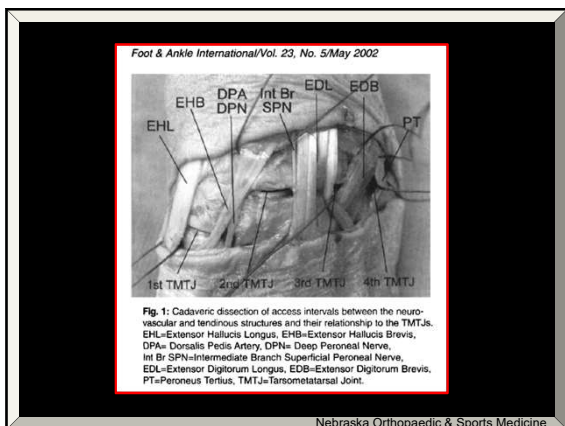














STAPLES

- I LIKE THEM AND I USE THEM
- \$\$, BUT EASY TO DO, STRONG ENOUGH
- REQUIRE LESS EXPOSURE
- NO PILOT HOLE, NO IATROGENIC FXS
- LESS RADS, FASTER OR, FEWER HWR
- MIDFOOT FIXATION OF CHOICE

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The Transverse Dorsal Approach to the Lisfranc Joint

Christopher J. Ventullo, MBBS, FRACS¹; Mark E. Easley M.D.²; James A. Nantley, M.D.³
Durham, NC

- EXCELLENT EXPOSURE OF TMTJs
- RESPECTS VASCULAR ANATOMY
- EXTENSILE?
- FIXATION?

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WHAT I DO

I TYPICALLY FIX THE LOW ENERGY, SUBTLE, "SPORTY" LIGAMENTOUS LISFRANC INJURIES IN SKILL ATHLETES W/ PERCUTANEOUS SUTURE BUTTON

- EASY "BUY-IN"
- MINIMALLY INVASIVE, PHYSIOLOGIC, LOW COMPLICATIONS
- FAIRLY QUICK RETURN TO PLAY

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WHAT I DO

FUSE IF SIGNIFICANT INSTABILITY, DIASTASIS, AND/OR INTRA-ARTICULAR FRACTURES

- INTERIOR LINEMEN, NON-ELITE?
- I SEE NO ROLE FOR TRADITIONAL (AO) ORIF OF LISFRANC INJURIES

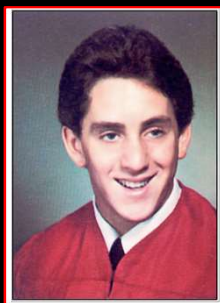
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WHAT I DO

- DORSAL, TRANSVERSE INCISION IS THE WAY TO GO, IMO
- STAPLES ARE STRONG ENOUGH & REQUIRE LESS EXPOSURE TO USE

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THANK YOU



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THANK YOU



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