



*A WHIRLWIND TOUR OF MODERN
ORTHOPEDIC TRAUMA - MIAMI STYLE:*
**COSMETIC MINI INCISION
ANKLE FRACTURE SURGERY
USING A FIBULA NAIL**

'OWN THE ANKLE'

CHRIS HODGKINS, MD

Miami Orthopedics and Sports Medicine Institute

PAOS

San Antonio, Texas

August 30th, 2019

RELEVANCE?



Dynamic. Decisive. Dedicated.



American College of
Foot and Ankle Surgeons®

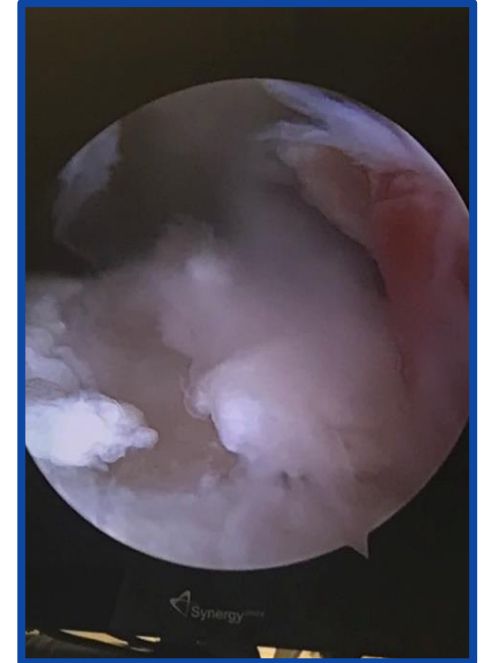
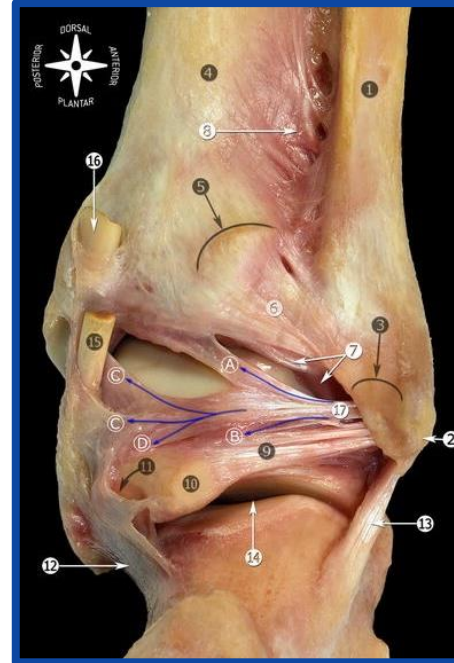
Proven leaders. Lifelong learners. Changing lives.



American Orthopaedic Society
for Sports Medicine

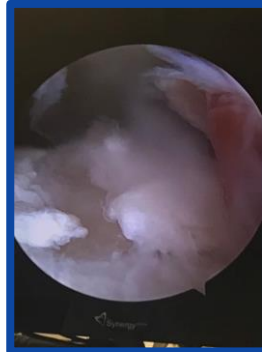
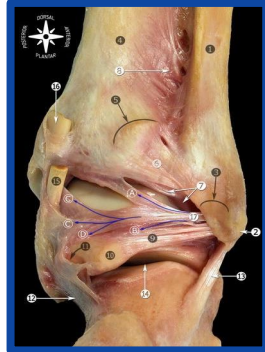
**ANKLE
FRACTURES
ARE
DIFFICULT!**

PROBLEM?



COMPLEX INJURIES OF BONE, SOFT TISSUE AND CARTILAGE

PROBLEM?



FAILURE TO ADDRESS PROPERLY LEADS TO POOR OUTCOMES

SOLUTION?



COMPREHENSIVE EVALUATION & TREATMENT

FIRST GOAL

'OWN THE ANKLE FRACTURE'

SECOND GOAL

'ALL INSIDE ANKLE'



DISCLAIMERS

- **THERE'S A LOT TO COVER**
- **PLEASE SLOW ME DOWN IF IM MOVING TOO QUICKLY**
- **INTERUPT ME WITH QUESTIONS**

IMPORTANT DISCLAIMERS

**NAIL ADVOCATE/HEAVY USER LONG BEFORE I ENGAGED
WITH ARTHREX**

I HAVE NO ROYALTIES IN THE NAIL

AN ENORMOUS AMOUNT OF BELIEF

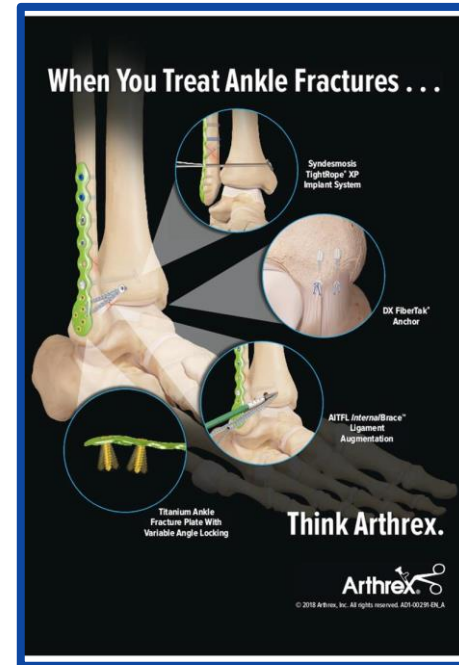
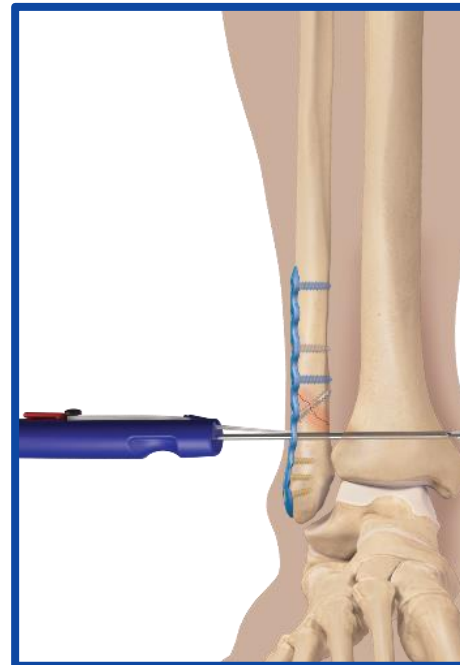
DISCLAIMERS

UNUSUAL
(UNHEALTHY)
PASSION FOR
ANKLE
INJURIES

ARTHREX
UNDERSTAND
THE
COMPLEXITY
OF THE ANKLE

EVERYTHING YOU NEED

TECHNOLOGY – PRODUCTS – TECHNIQUES - SERVICE



TO SUPPORT THIS COMPREHENSIVE TREATMENT APPROACH

EDUCATIONAL COMMITMENT



The Arthrex Medical Education Experience



With several hundred years of collective orthopedic experience, the Arthrex Medical Education Team is committed to **providing the finest educational experience focused on the safe and effective use of Arthrex products and techniques.**

Educational Events



We offer various types of educational events, many of them taught by world-renowned faculty.
[Learn More](#)

Our Experience



Our dedicated staff of orthopedic surgeons and professionals provide an unparalleled educational experience.
[Learn More](#)

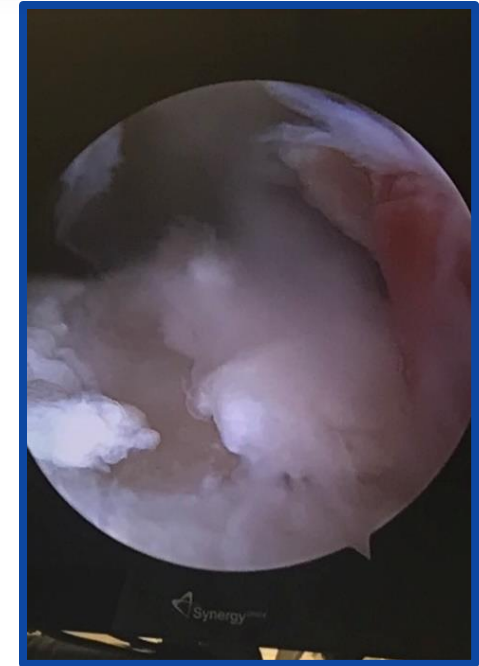
Global Education



As a worldwide leader in minimally invasive orthopedics, our training spans the globe.
[Learn More](#)

COMPLEX INJURIES

INTRA ARTICULAR INJURIES TO BONE, SOFT TISSUE AND CARTILAGE

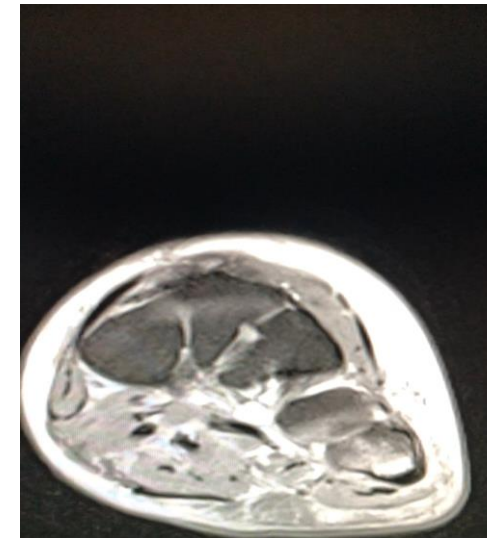
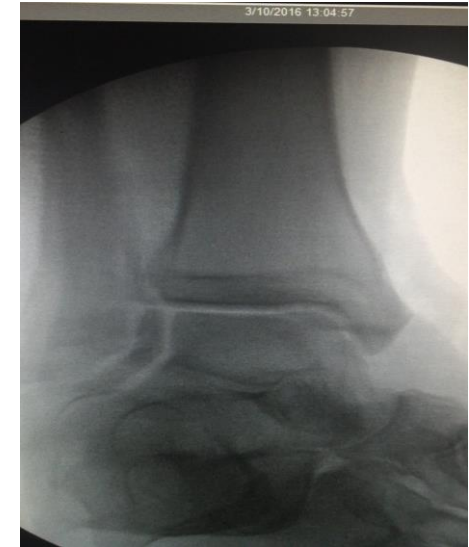


XRAY VISION IS SHORT SIGHTED



RATHER, I SEE THIS:

3 DIMENSIONAL DYNAMIC BONE AND SOFT TISSUE ANATOMY



**PRE OP EVALUATION
(CT/NANO SCOPE)**

ARTHROSCOPY

FRACTURES

KEY FOCUS AREAS

'OWN THE ANKLE'

**LIGAMENTOUS INJURIES
(SYNDESMOSIS/DELTOID)**

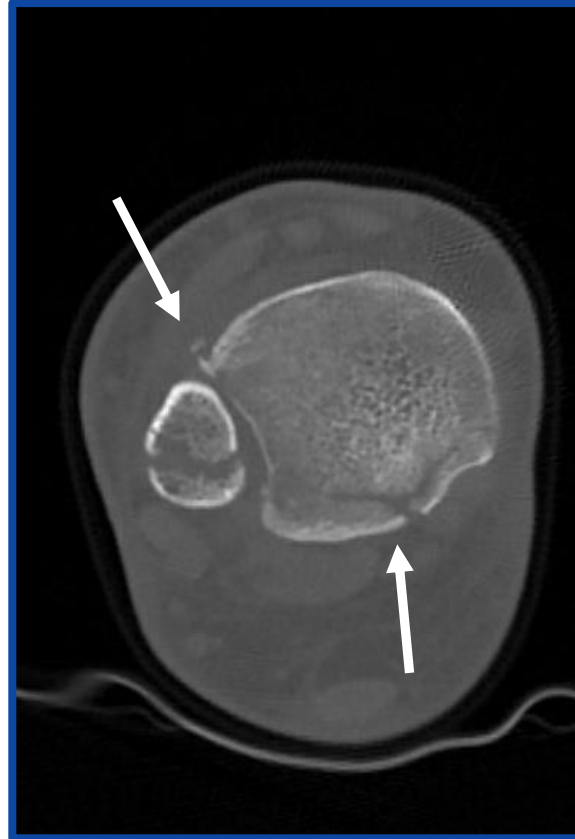
BIOLOGICS

**OUTCOMES
MONITORING**

KEY FOCUS AREAS

PRE OP CT SCAN

PRE OP CT SCAN

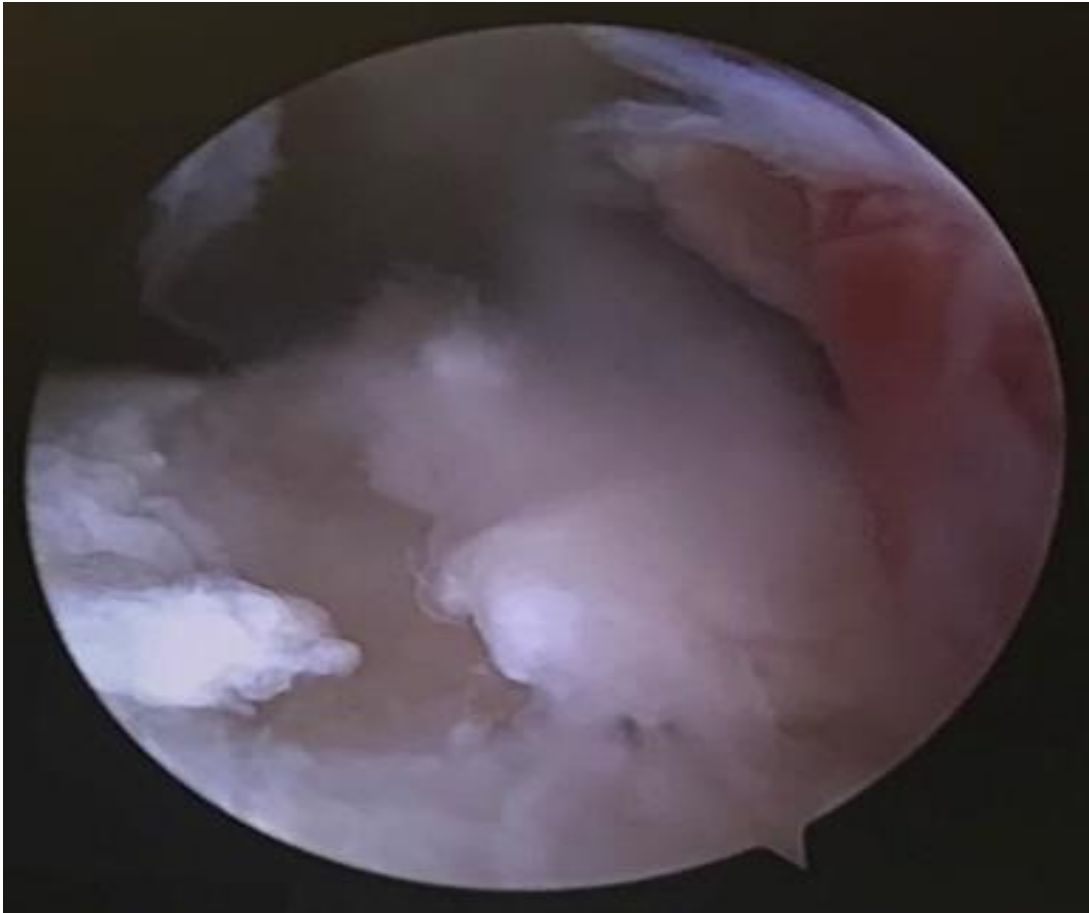


KEY FOCUS AREAS

ANKLE FRACTURE

ARTHROSCOPY

ANKLE FRACTURE ARTHROSCOPY



IDENTIFY AND TREAT:

- Chondral injuries
- Ligamentous injuries and instability

CONFIRM REDUCTION

DOCUMENT PATHOLOGY



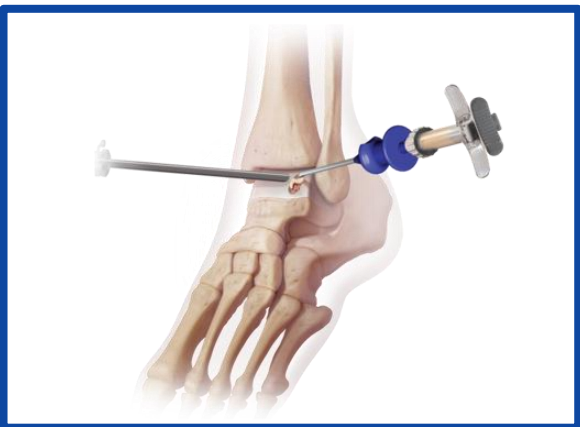
SYNERGY MATRIX™ INTEGRATED OR

NANOSCOPE



'OWN THE ANKLE'
PAOS, 2019

ROOM FOR INNOVATION



INTRA ARTICULAR BIOLOGICS

- BIOCARTILAGE
- CARTIFORM
- BMAC

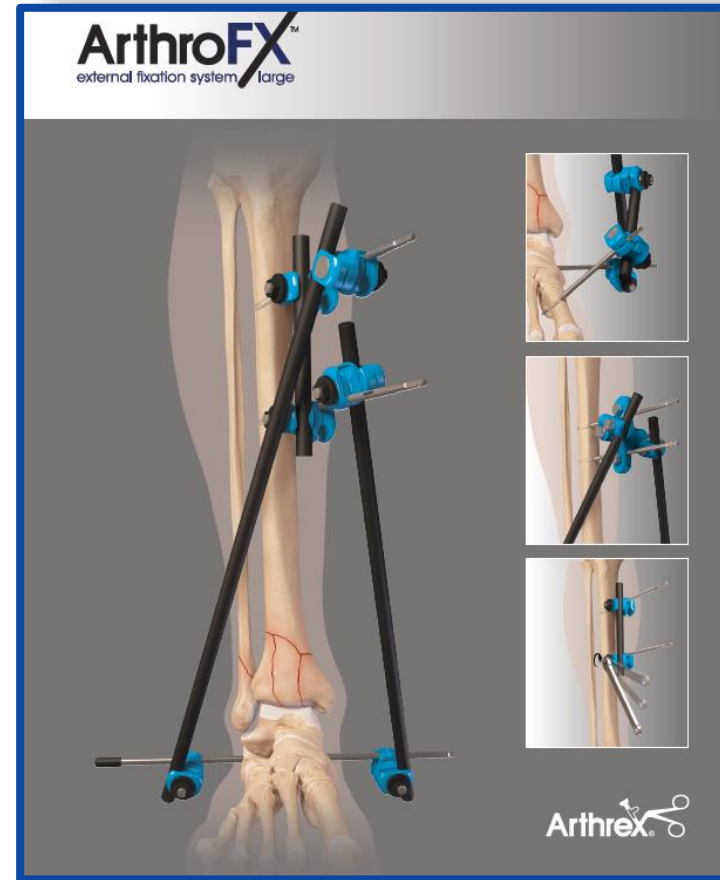
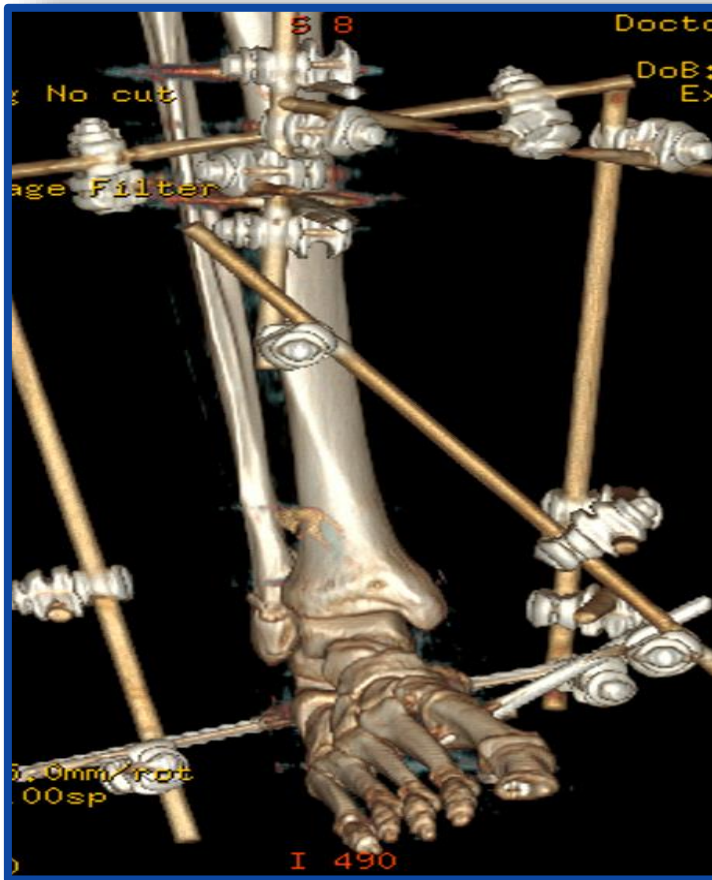


KEY FOCUS AREAS

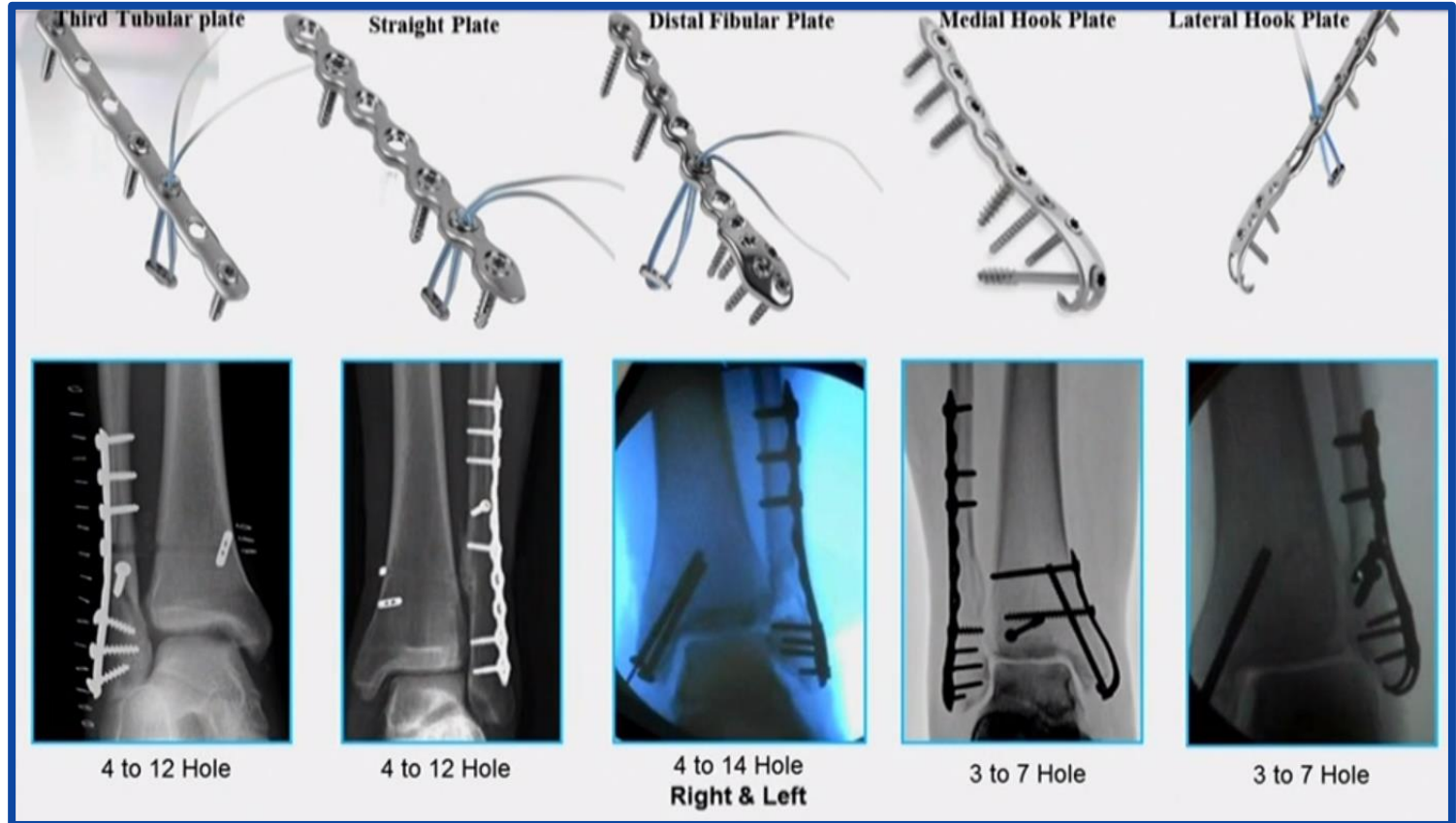
ANKLE FRACTURE

HARDWARE

ARTHRO FX EX FIX



ANKLE FRACTURE TRAY



DISTAL TIBIA/PILON TRAY

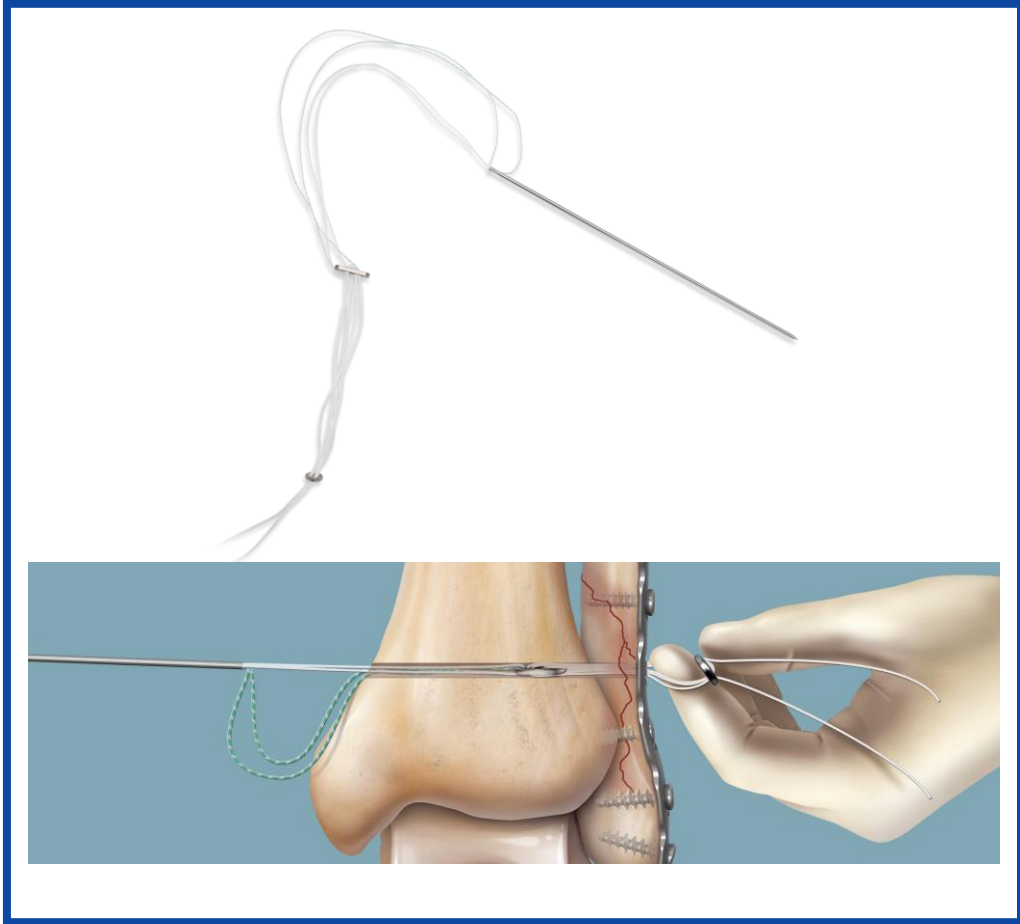


KEY FOCUS AREAS

LIGAMENTOUS INJURIES

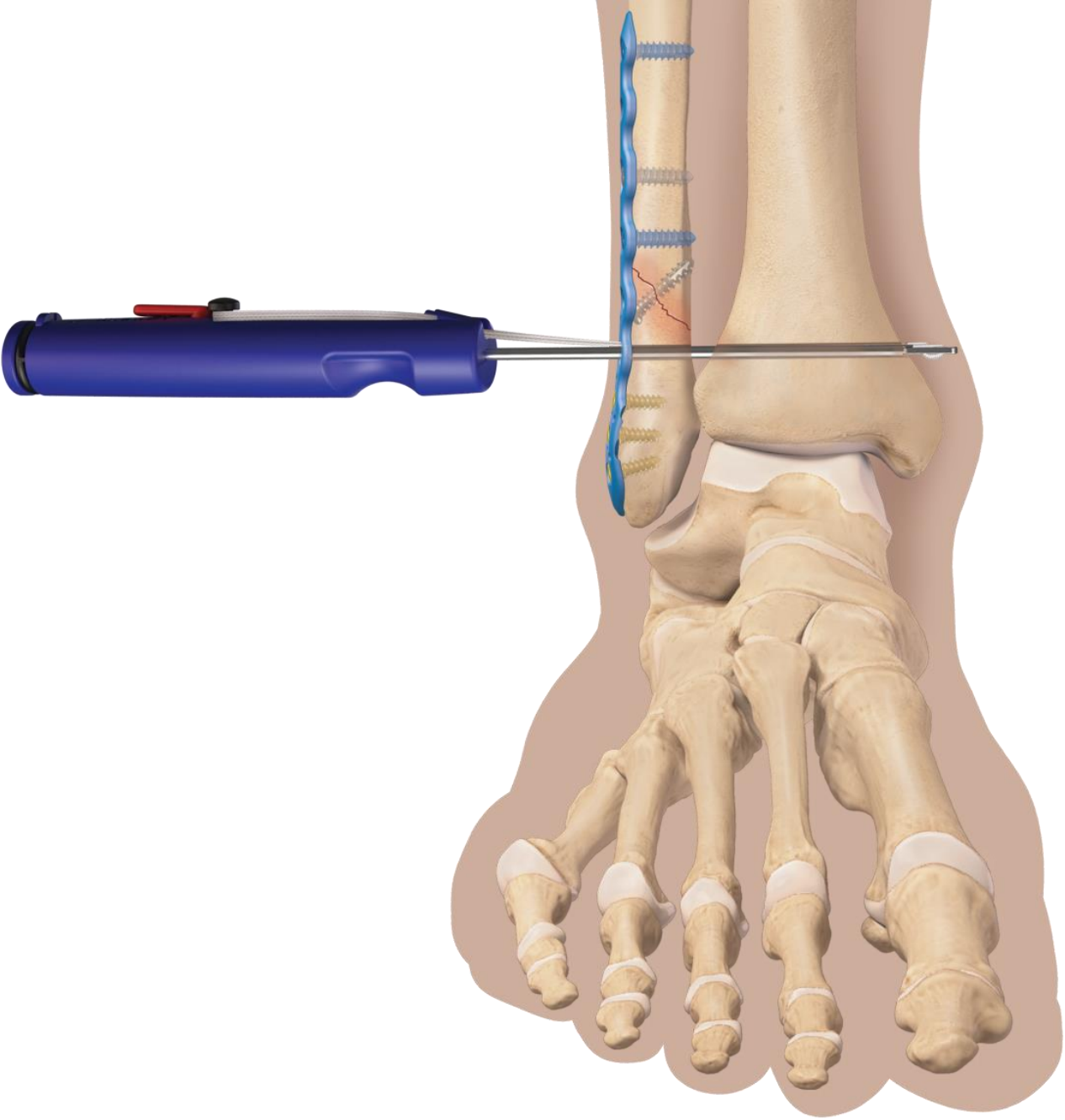
SYNDESMOSIS/DELTOID

KNOTLESS SYNDESMOSIS TIGHTROPE



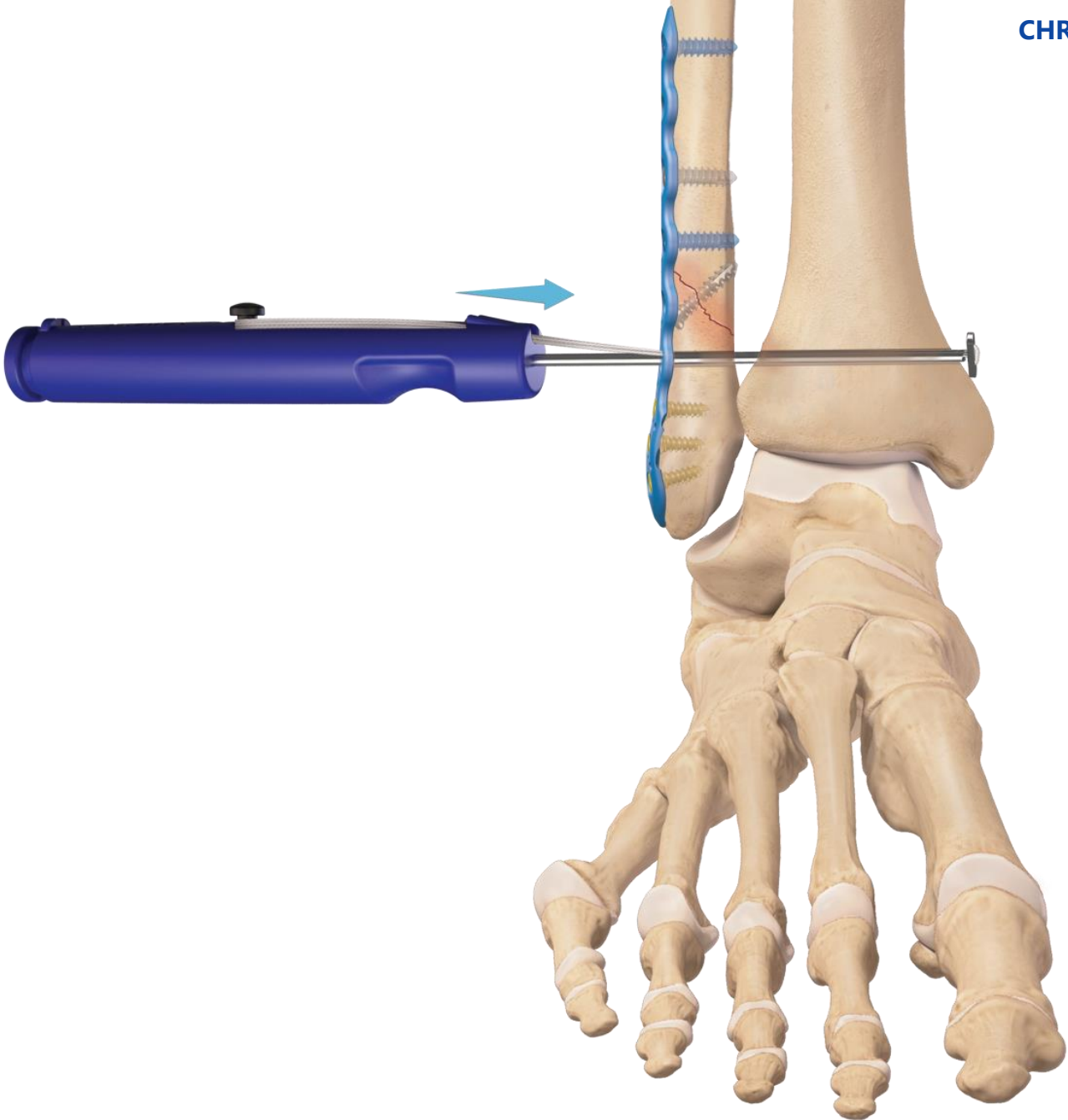
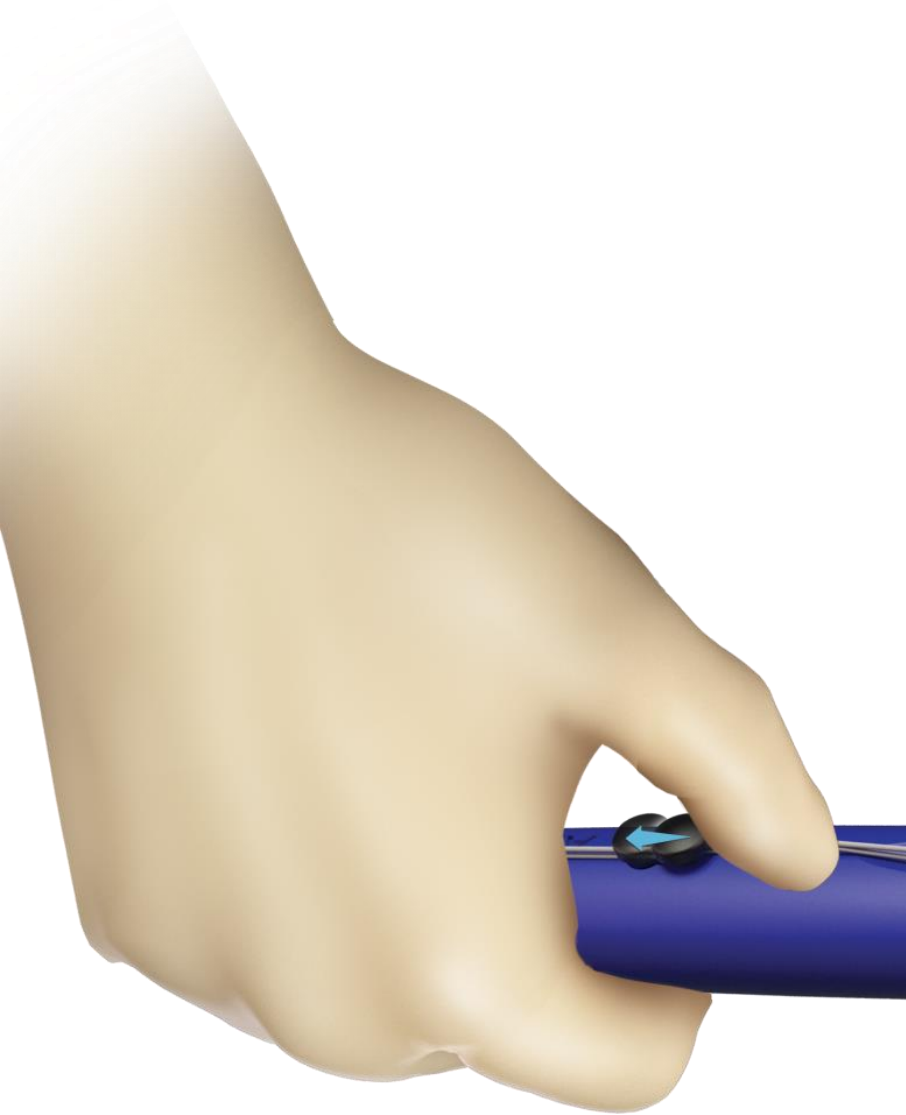
TIGHTROPE XP

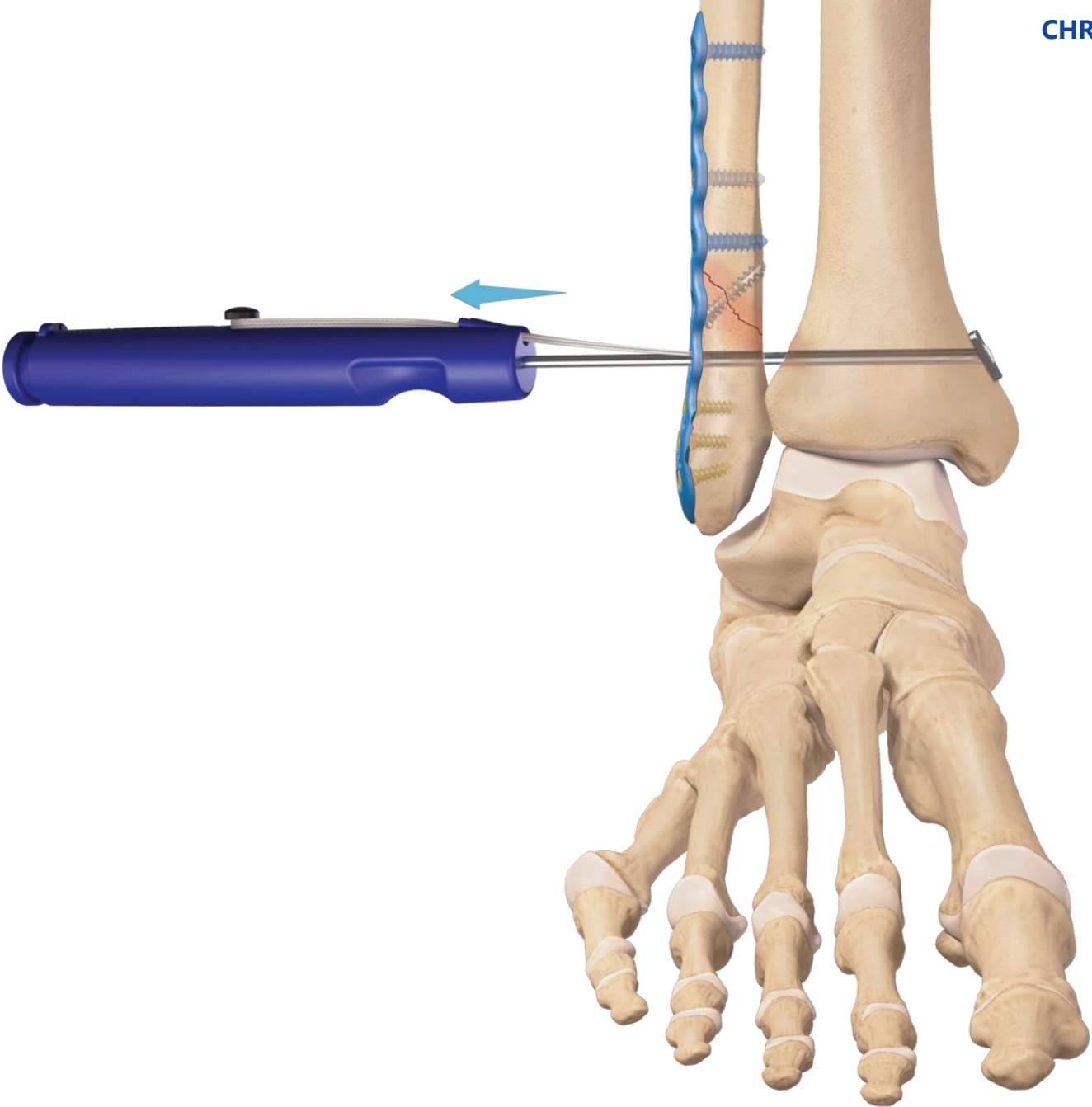


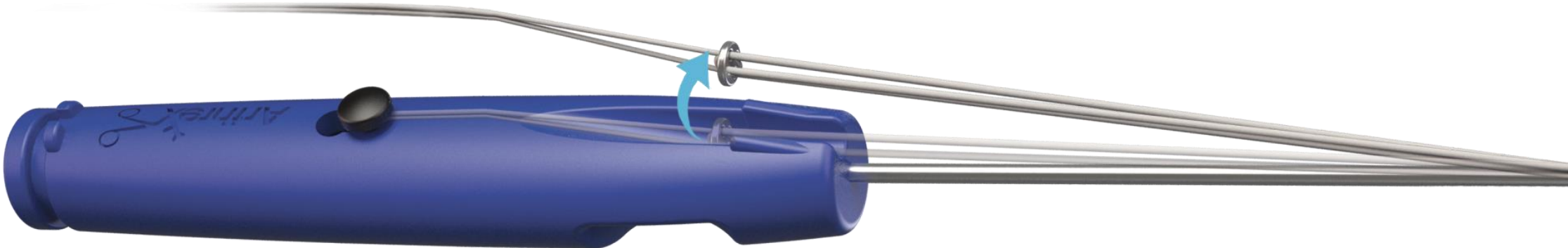


'OWN THE ANKLE'
PAOS, 2019



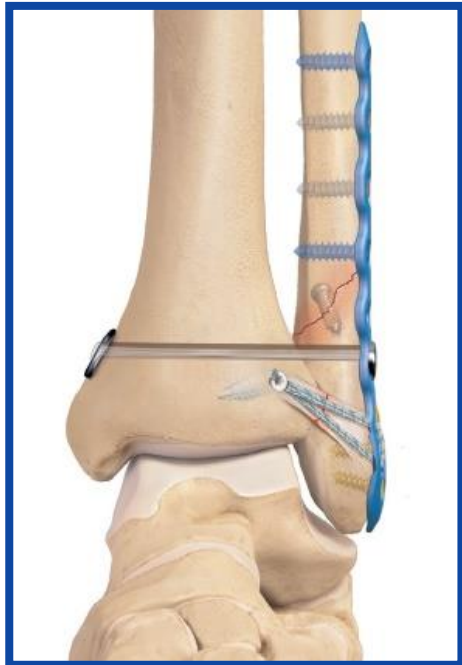






SOFT TISSUE

REPAIR – RECONSTRUCT - REINFORCE

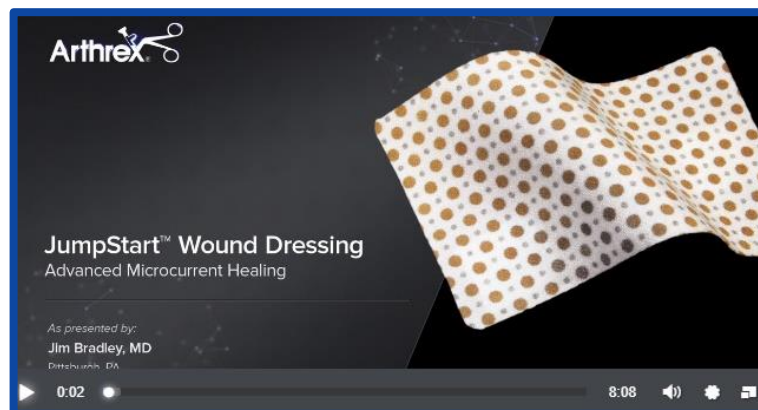


REPAIR – RECONSTRUCT - REINFORCE

KEY FOCUS AREAS

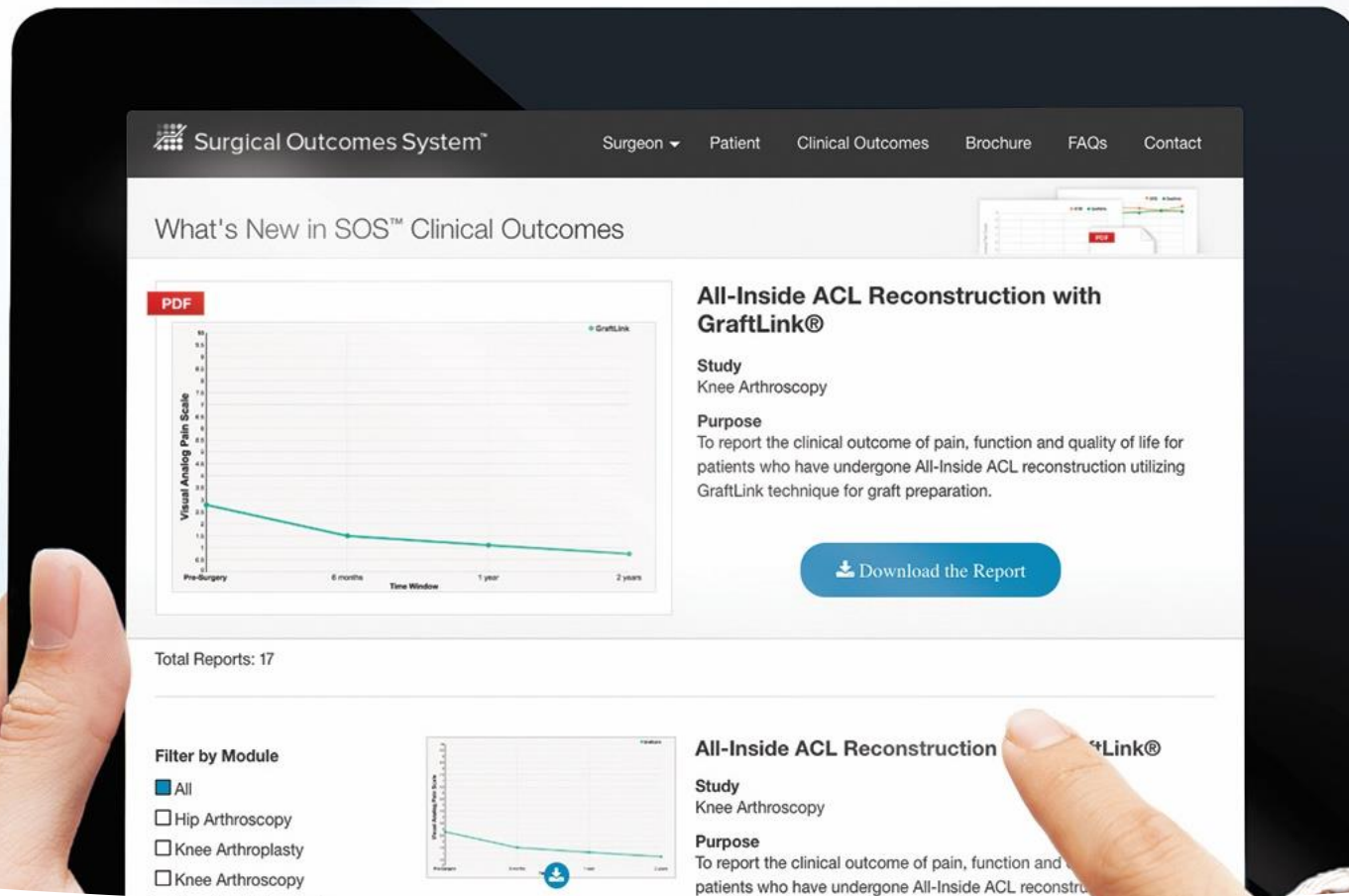
BIOLOGICS AND
WOUND CARE

BIOLOGICS FOR THE JOINT, FRACTURE AND SOFT TISSUE



KEY FOCUS AREAS

OUTCOMES
MONITORING



SURGICAL OUTCOMES SYSTEM™ (SOS) GLOBAL REGISTRY

Partnering for Better Patient Outcomes

FIRST GOAL

OWN THE ANKLE
FRACTURE



SECOND GOAL

THE ALL INSIDE ANKLE

THE ARTHREX FibuLock

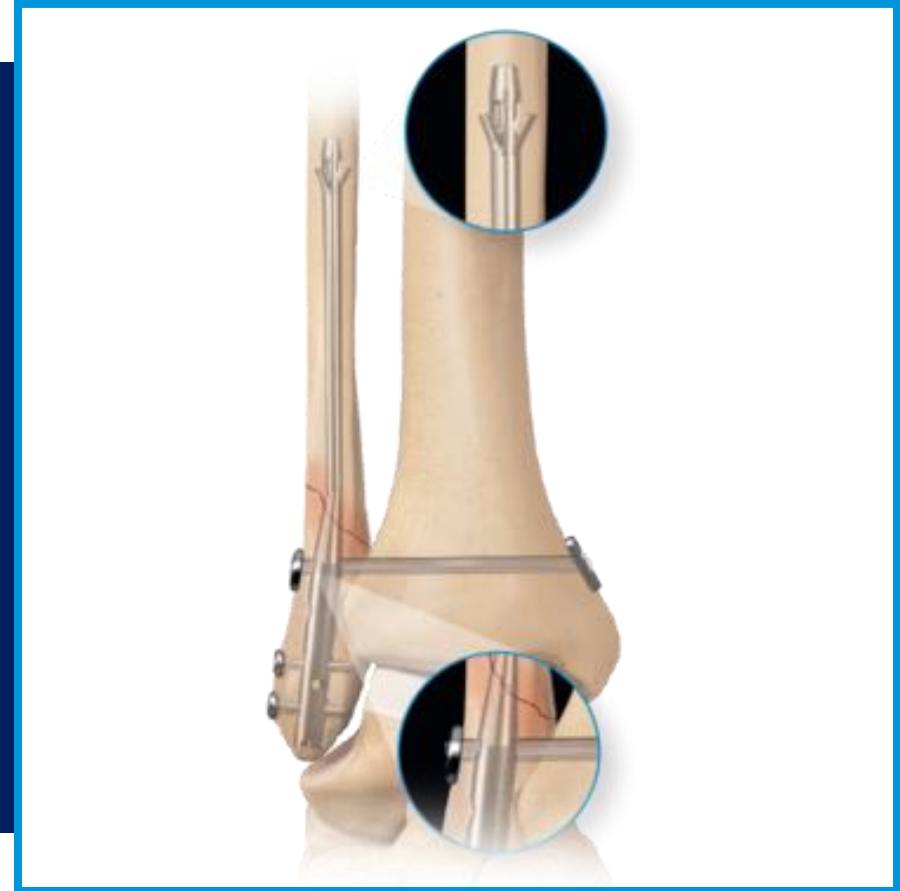


FIBULOCK

INTRAMEDULLARY FIBULA FIXATION

Allowing a minimally invasive approach

Only nail on the market with proximal talons

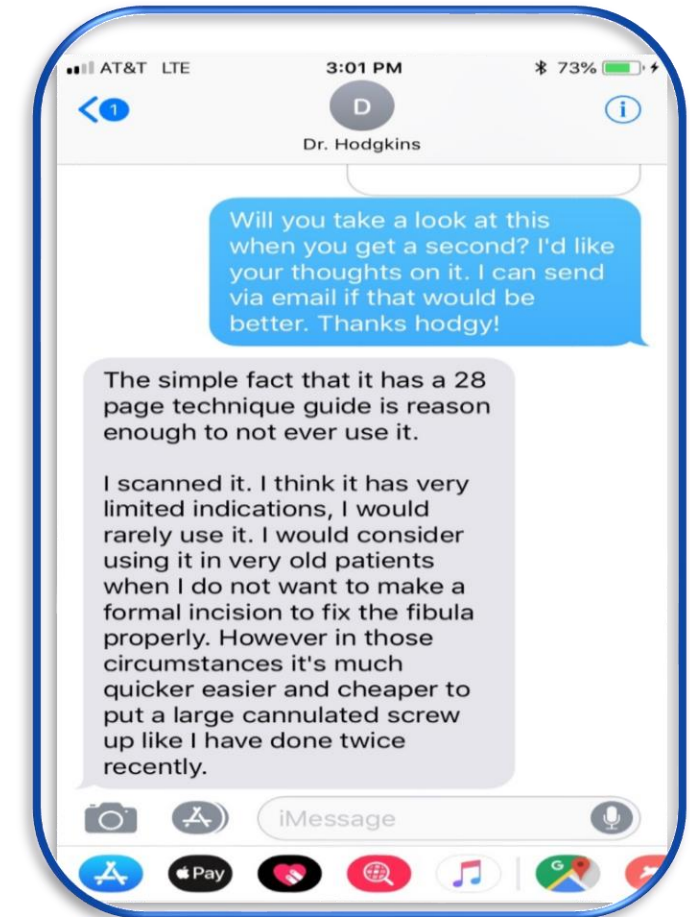
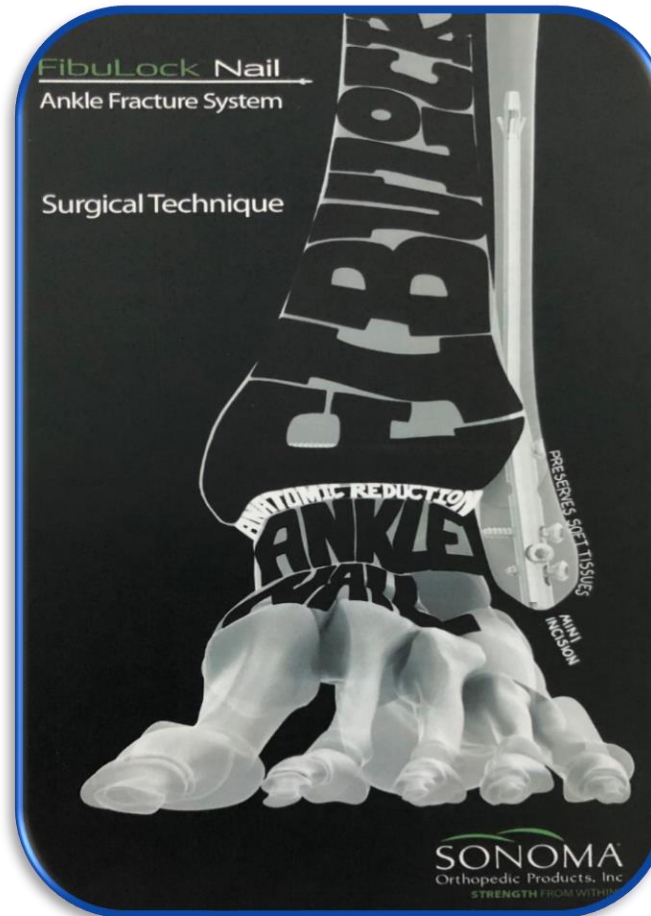
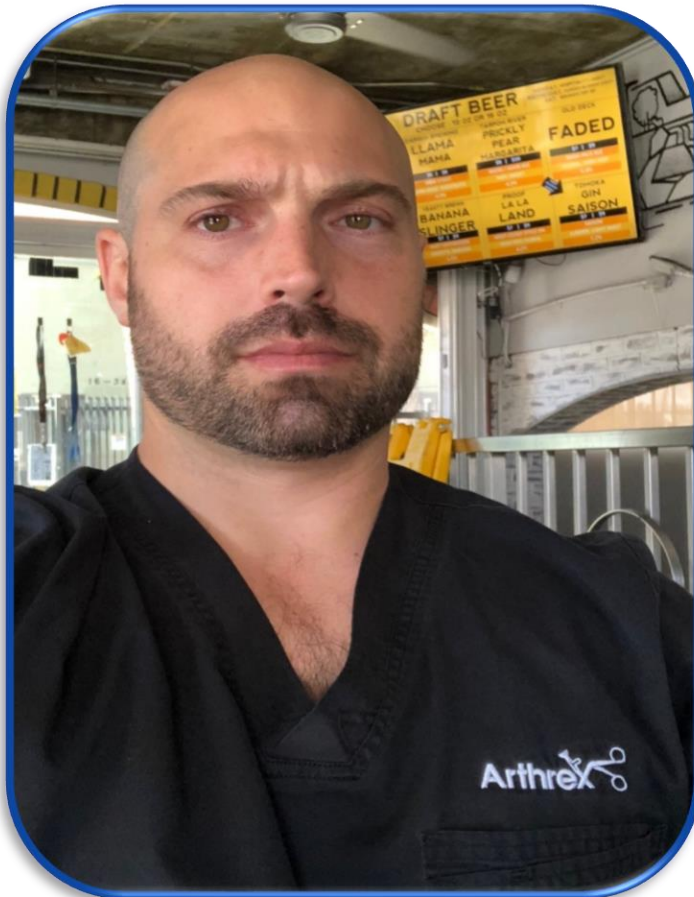


BEFORE YOU NAYSAY

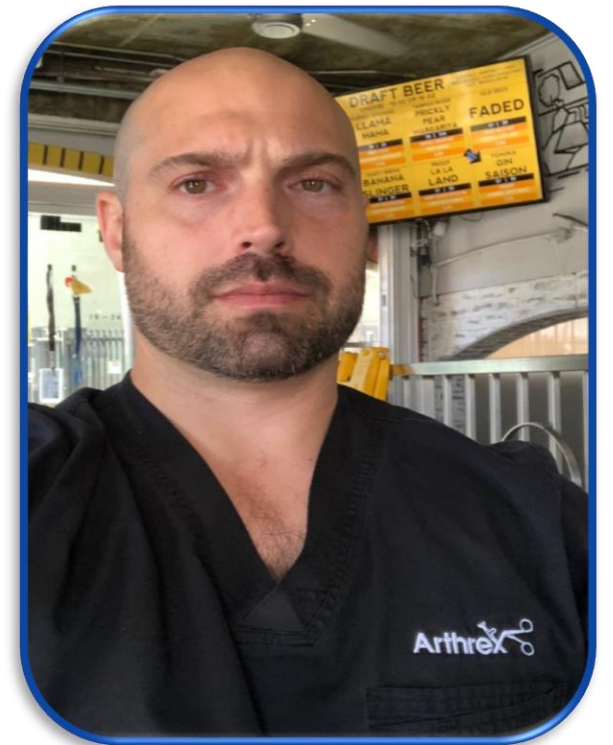
(LIKE I DID)

MY STORY

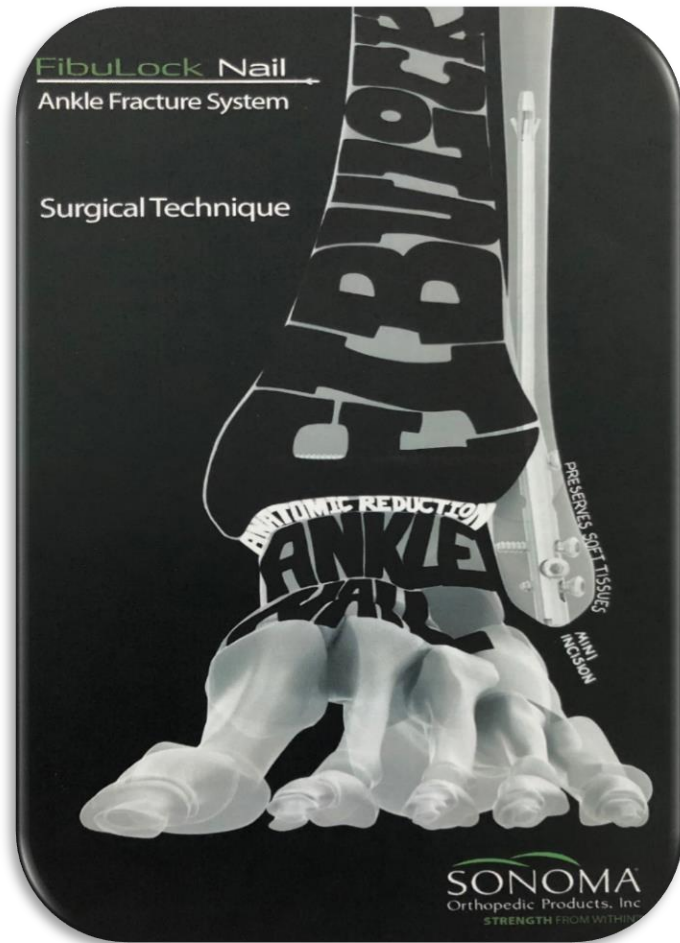
FIBULA NAIL?



Will you take a look at this when you get a second? I'd like your thoughts on it. I can send via email if that would be better. Thanks hodgy!



Will you take a look at this when you get a second? I'd like your thoughts on it. I can send via email if that would be better. Thanks hodgy!



The simple fact that it has a 28 page technique guide is reason enough to not ever use it.

I scanned it. I think it has very limited indications, I would rarely use it. I would consider using it in very old patients when I do not want to make a formal incision to fix the fibula

Will you take a look at this when you get a second? I'd like your thoughts on it. I can send via email if that would be better. Thanks hodgy!



**NO
THANK
YOU,
DON'T
ASK ME
AGAIN!**

BUT...

SINCE THAT TEXT:

OVER **100 NAILS**
IN LAST YEAR

SO WHAT CHANGED?

LET'S TAKE A LOOK:

SHORT SIGHTED

NOTHING WRONG WITH MY TRADITIONAL ORIF TECHNIQUE!



Quick
Easy
Reproducible
Reliable



THE NAIL HAD NARROW INDICATIONS?

THE FIBULOCK: WHO IS IT FOR?

POOR SOFT TISSUE HOSTS:

Elderly

Diabetics

Renal

Vasculopaths



WHY DOES IT MAKE SENSE FOR THESE PATIENTS?

RESPECTS BIOLOGY:

Minimal soft tissue disruption

Minimal blood supply/periosteal disruption

Less swelling

Less wound complications

Quicker/safer/better



WHY DOES IT MAKE SENSE FOR THESE PATIENTS?

RESPECTS BIOLOGY:

Minimal soft tissue disruption

Minimal blood supply/periosteal disruption

Less swelling

Less wound complications

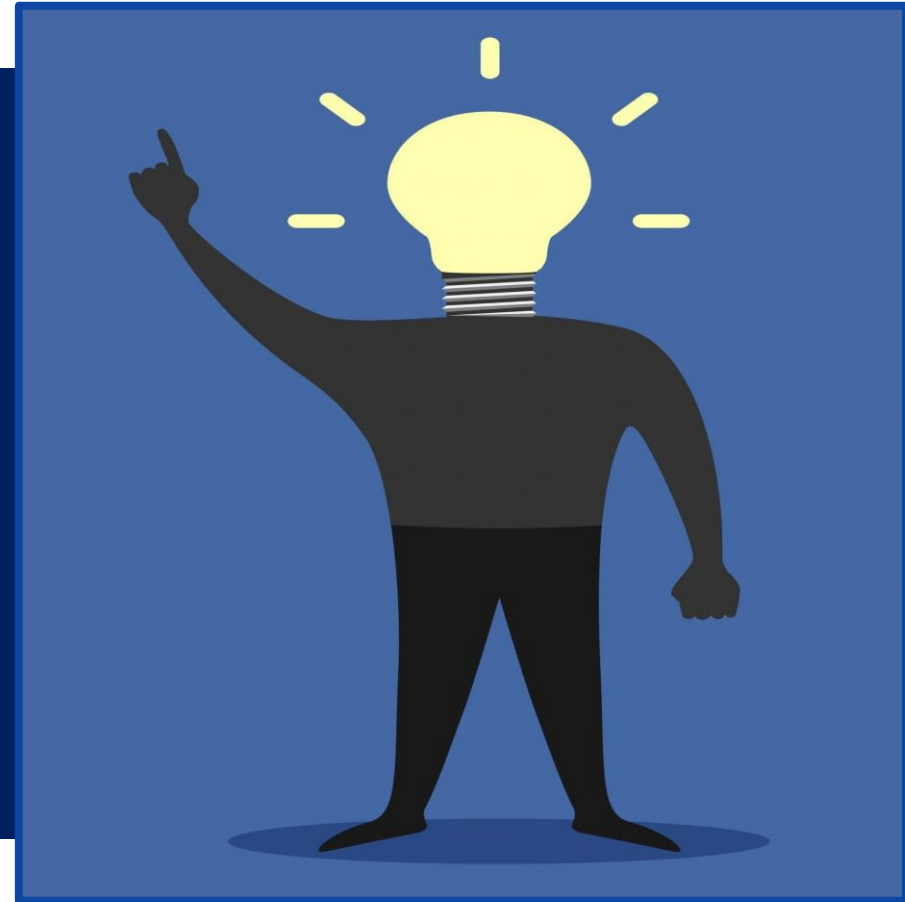
Quicker/safer/better



MY FIRST FIBULOCK

**WHY AM I RESERVING THIS
RESPECT FOR ONLY MY HIGH RISK
PATIENTS?!**

**WHY AM I NOT APPLYING BEST
SURGICAL PRINCIPLES TO ALL OF
MY PATIENTS?**



MY FIRST FIBULOCK

=

MY LAST PLATE

FIBULOCK

OVER 100 NAILS
IN 1 YEAR

FIBULOCK

**VERY EXCITED &
IMPRESSED WITH
EARLY RESULTS**

WHY?

IT ALLOWS A MUCH MORE MINIMALLY INVASIVE BIOLOGY RESPECTING APPROACH!





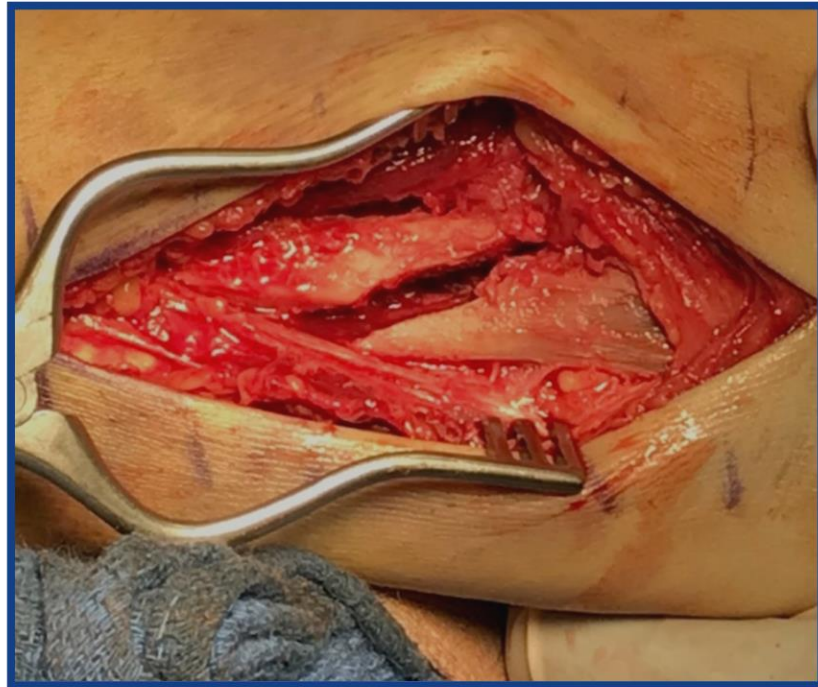
'OWN THE ANKLE'
PAOS, 2019

SIGNIFICANT ADVANTAGES

SMALLER INCISIONS



BUT – IT'S ABOUT MUCH MORE THAN COSMESIS



**IT'S
ABOUT
BIOLOGY
!!**



INTRAMEDULLARY BONE GRAFTING



INTRAMEDULLARY LOAD SHARING AND BEARING



FURTHER INCREASING OUR BIOLOGIC AND MECHANICAL ADVANTAGE

QUICKER SURGERY



LESS PAIN AND SWELLING/EARLIER MOTION



FASTER WEIGHT BEARING

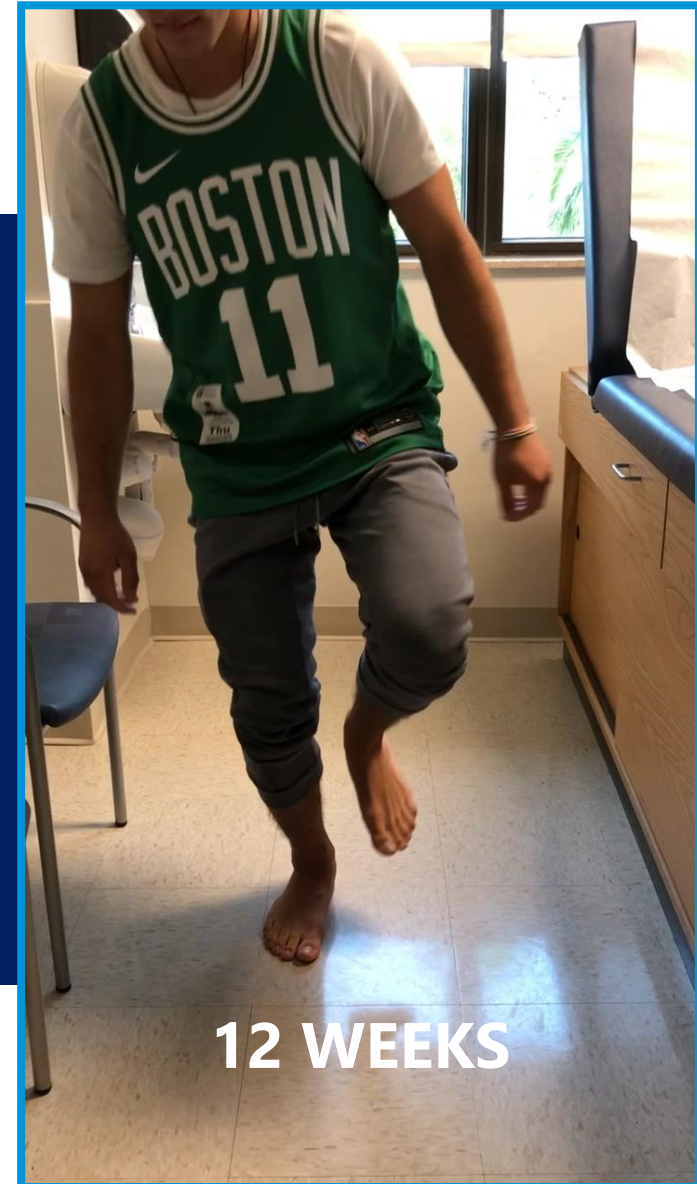
6 WEEKS POST OP

SCOPE/FIBULOCK/DELTOID REPAIR/TIGHTROPE



6 WEEKS POST OP!

FASTER RETURN TO PLAY



12 WEEKS

IMPROVED OUTCOMES/HAPPIER PATIENTS



MY ANKLE FRACTURE INJURY PROTOCOL

MY PROTOCOL

CT SCAN

SCOPE

FRACTURES

FIBULOCK UNLESS CONTRAINDICATED

**LOOK FOR
LIGAMENTOUS
INSTABILITY**

FIX SDS/DELTOID

**CONSIDER
BIOLOGICS**

MY FIBULOCK INDICATIONS

- ALL UNSTABLE ANKLE FX PATTERNS
- ASK YOURSELF:
'WHY NOT APPLY THE SAME RESPECT FOR BIOLOGY TO ALL FRACTURES?'
- I HAVE TO FIND A REASON NOT TO USE IT (VERY FEW)



FIBULOCK TECHNIQUE:

INCISIONS

FIBULOCK TECHNIQUE: INCISIONS

PERC (5%)



MINI OPEN (90%)



OPEN (5%)



(ALWAYS SMALLER THAN A PLATE)

FIBULOCK TECHNIQUE: INCISIONS

MUST NEVER SACRIFICE ANATOMIC FX REDUCTION FOR A SMALL INCISION!

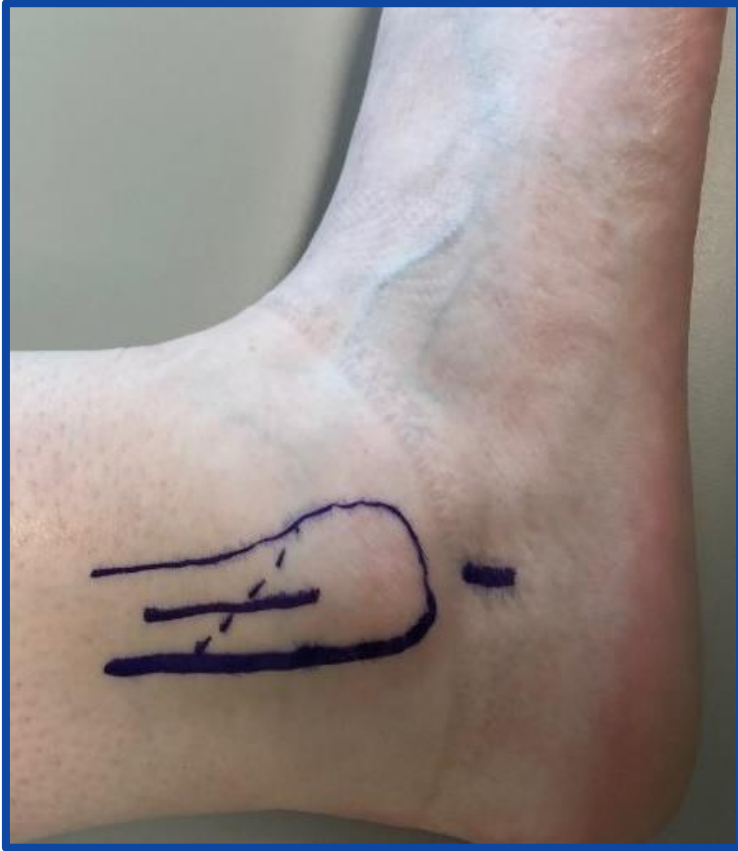
RECOMMEND STARTING WITH GENEROUS OPEN INCISIONS

SMALLER INCISIONS WITH EXPERIENCE

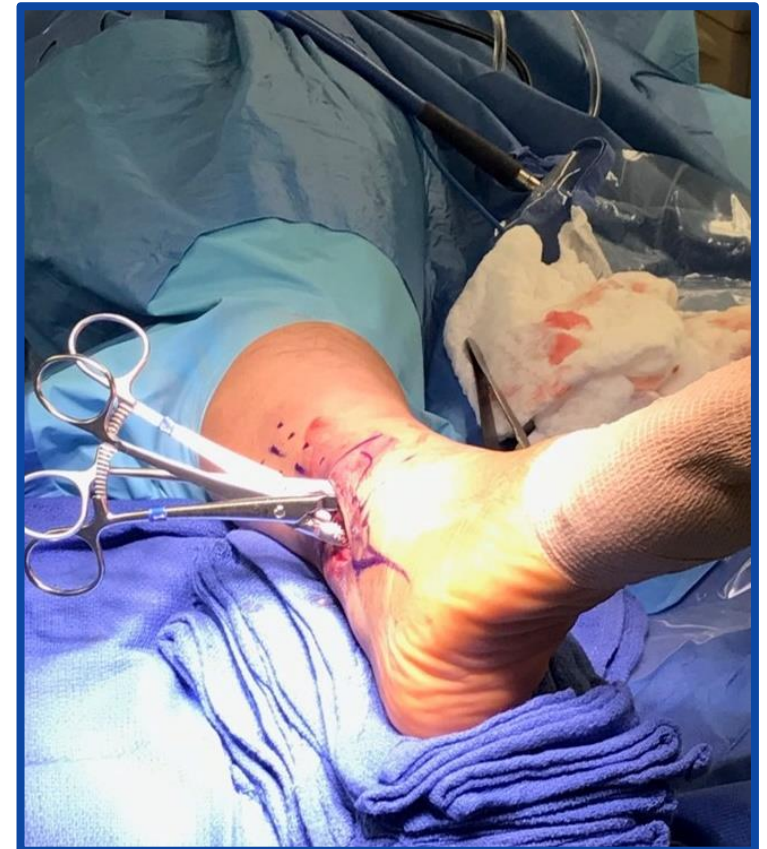
INCISIONS: ENTRY INCISION



INCISIONS: MARK OUT WITH FLUORO



REDUCE/CLAMP FRACTURE



ESTABLISH ENTRY POINT



ADVANCE FLEXIBLE WIRE ON BOTH VIEWS



DISTAL 6.2MM REAMER



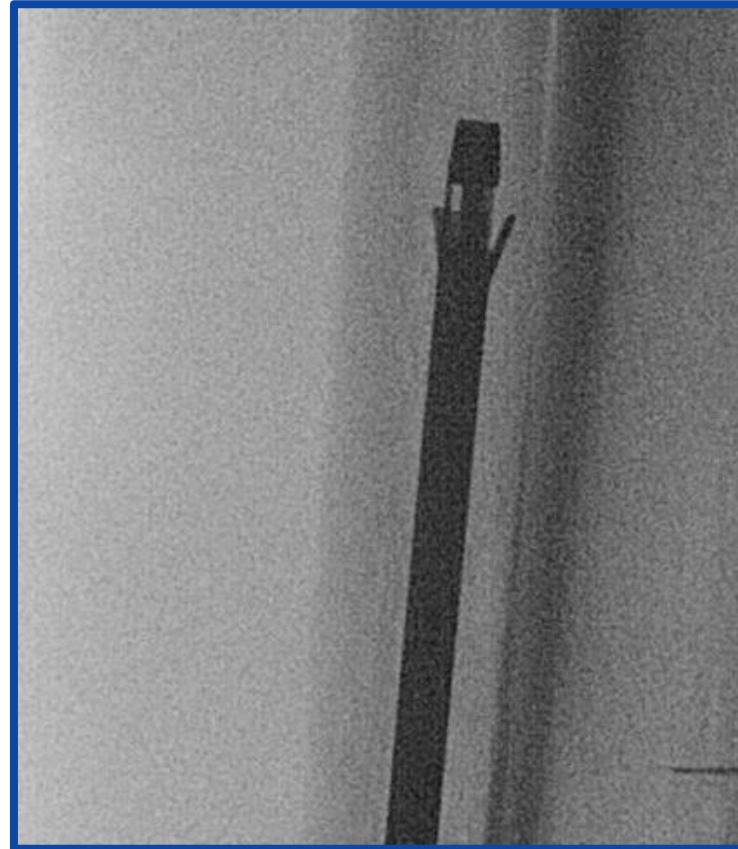
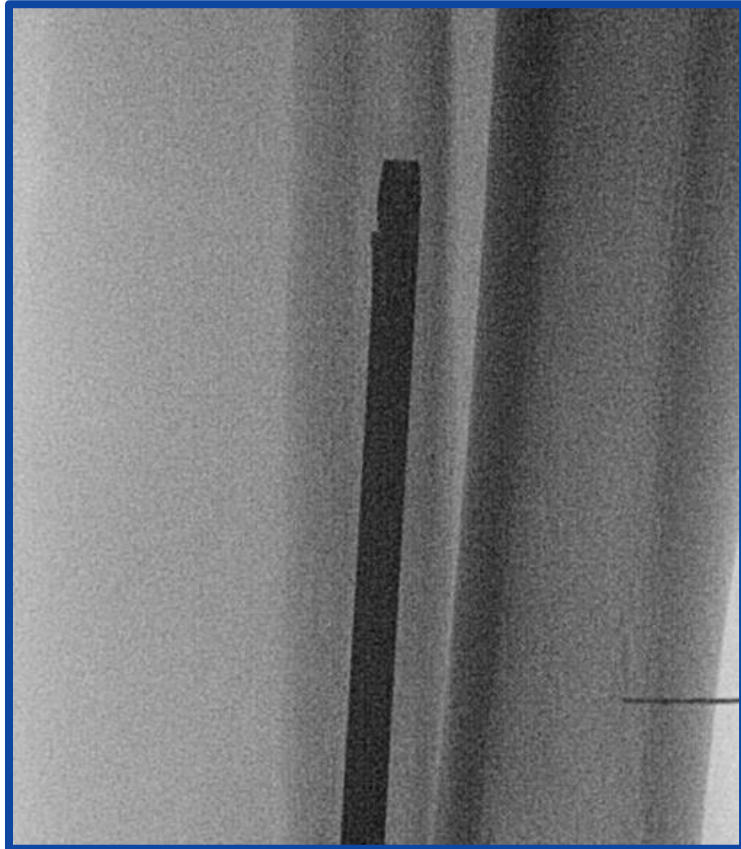
PROXIMAL 3.2 MM REAMER



INSERT NAIL



DEPLOY PROXIMAL TALONS



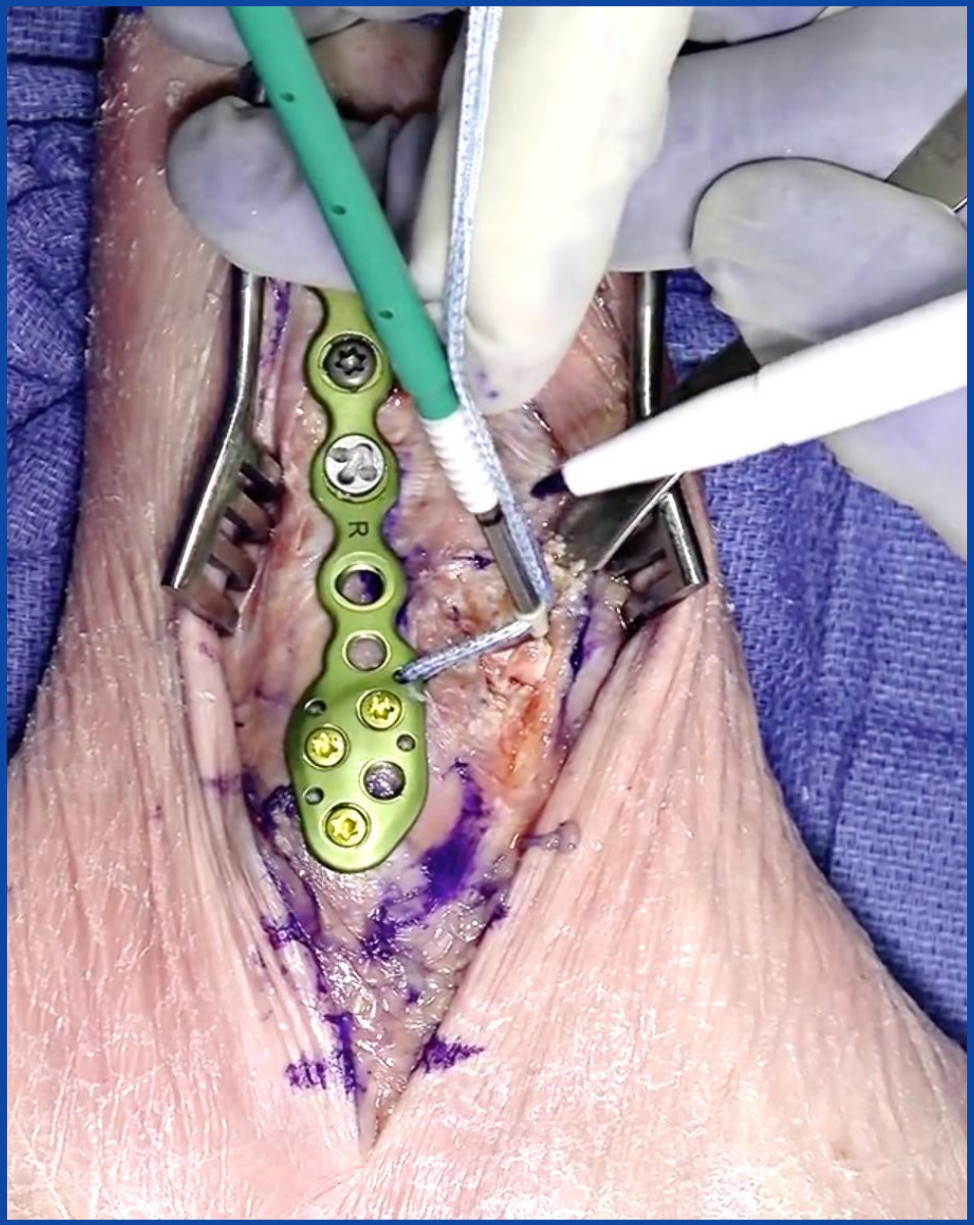
**Length &
Rotation
Control**

INSERT DISTAL SCREWS



CONSIDER SYNDESMOSIS





'OWN THE ANKLE'
PAOS, 2019

FIBULOCK: POST OP PROTOCOL



- **0-2: Splint for 2 weeks**
- **2-6: Boot, inc to WBAT, start PT**
- **6 weeks: transition boot to brace**
- **3 months: adv as tol (pushing this)**

NWB 6 WEEKS:

- Any other fractures
- Grossly unstable SDS
- Elderly/osteoporotic/other
- Diabetic (8-12 weeks)

IMPORTANT:

FIBULOCK FITS ALL

PATIENT AGE/SOFT TISSUE QUALITY

FX CLASSIFICATION/ENERGY

ASSOCIATED FRACTURES

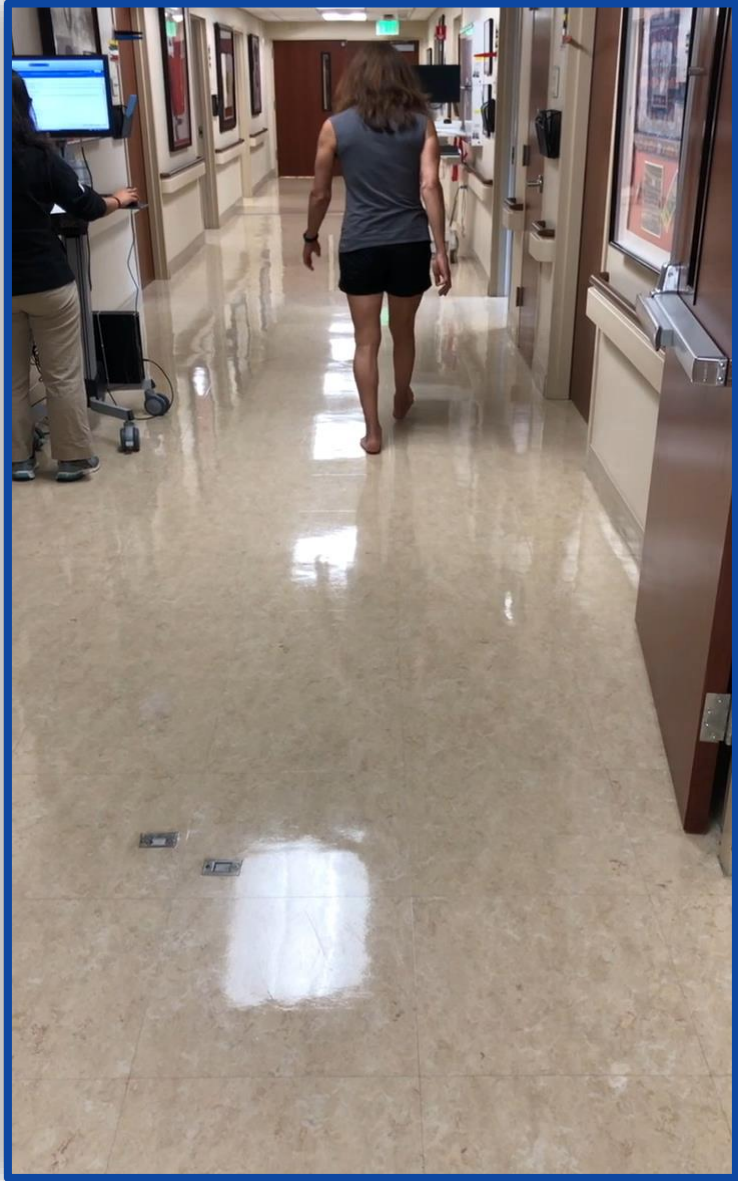
LIGAMENTOUS INJURIES

STANDARD WEBER B



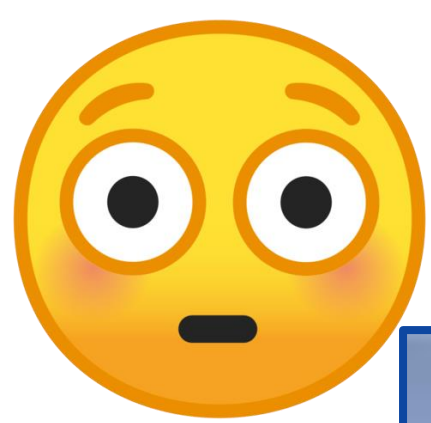
6 WEEKS POST OP

CHRIS HODGKINS, MD

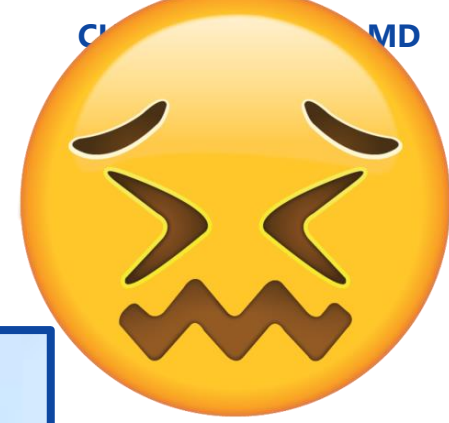


8 WEEKS POST OP

'OWN THE ANKLE'
PAOS, 2019



CLOSE YOUR EYES



'OWN THE ANKLE'
PAOS, 2019

WEBER B + DELTOID



WEBER C



BIMALLEOLAR ANKLE FRACTURES



**PHOTOGRAPH COURTESY OF
ANDREW HSU, MD**

BIMALLEOLAR ANKLE FRACTURES



TRIMALLEOLAR ANKLE FRACTURES



'OWN THE ANKLE'
PAOS, 2019

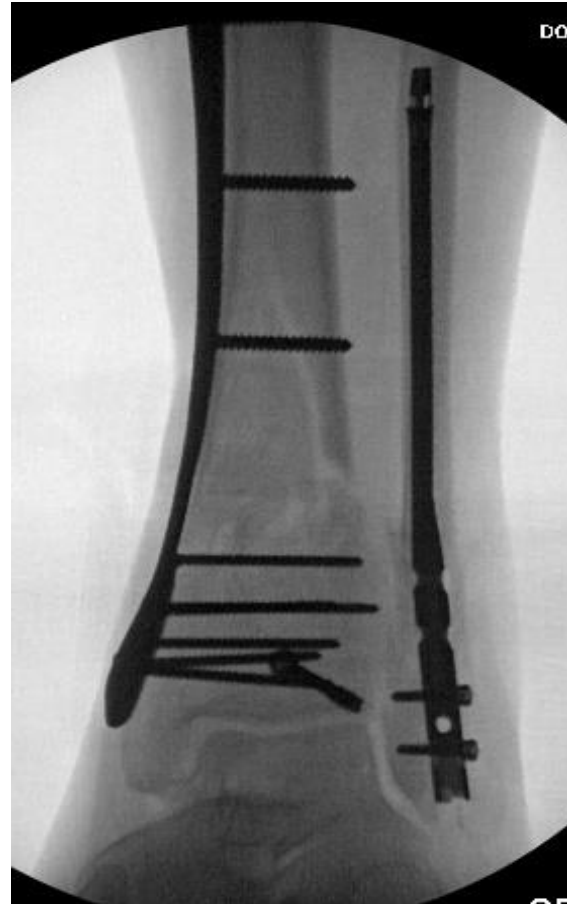
COMMUNUTED FIBULA FX'S



FRACTURE DISLOCATIONS



TRANSVERSE DIABETIC FX'S



DISTAL TIB/FIB FX'S

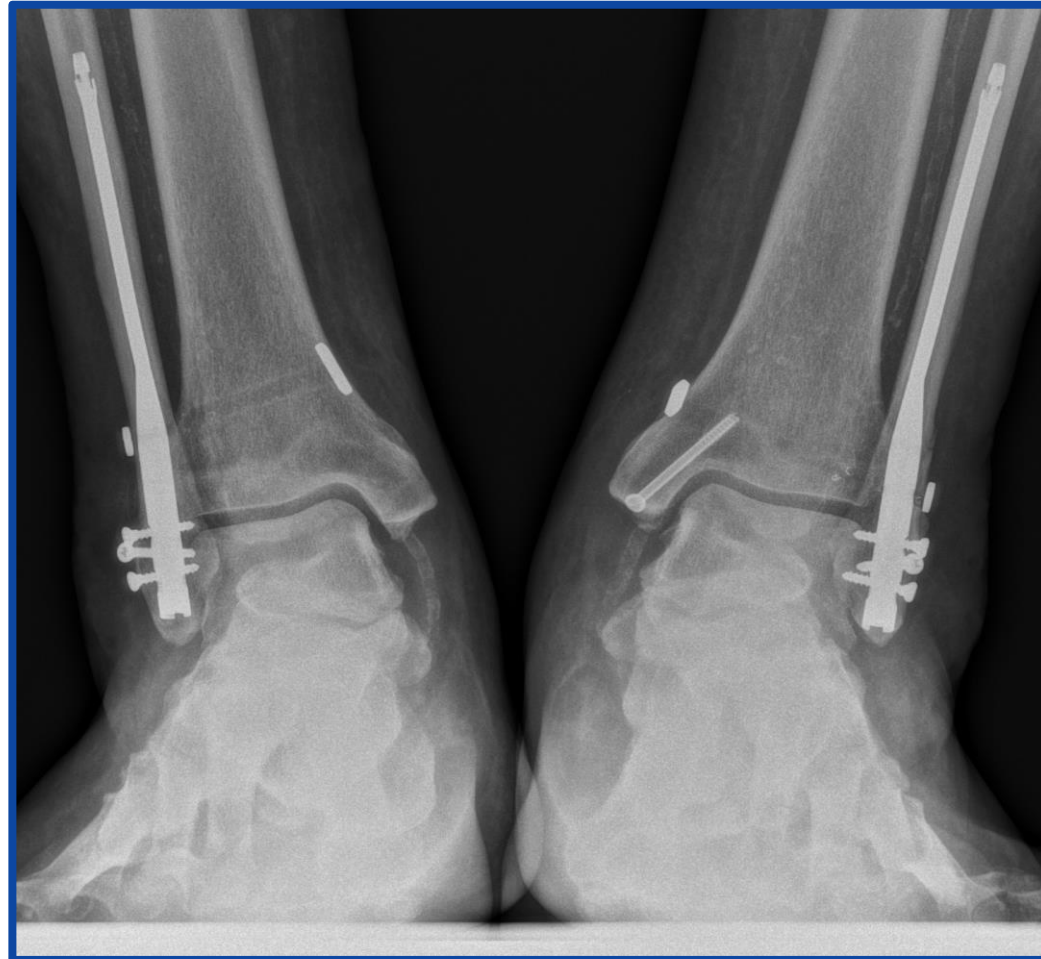


SEGMENTAL FIBULA



'OWN THE ANKLE'
PAOS, 2019

BILATERAL CASES



'OWN THE ANKLE'
PAOS, 2019

PILONS WITH EX FIX



PRONE WITH PL APPROACH

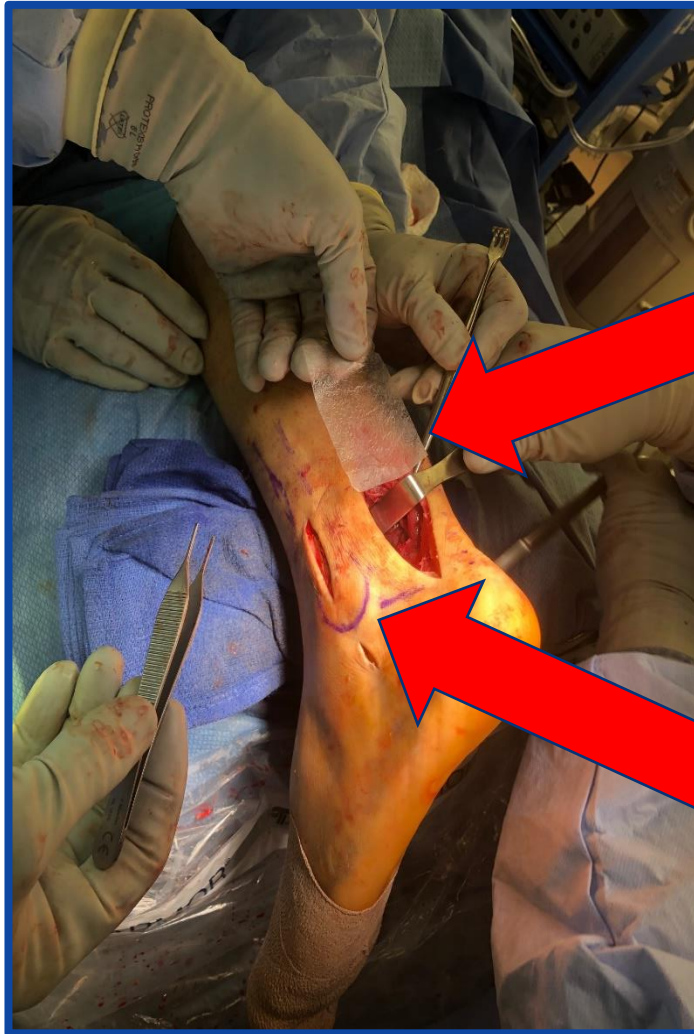


PRONE WITH PL APPROACH

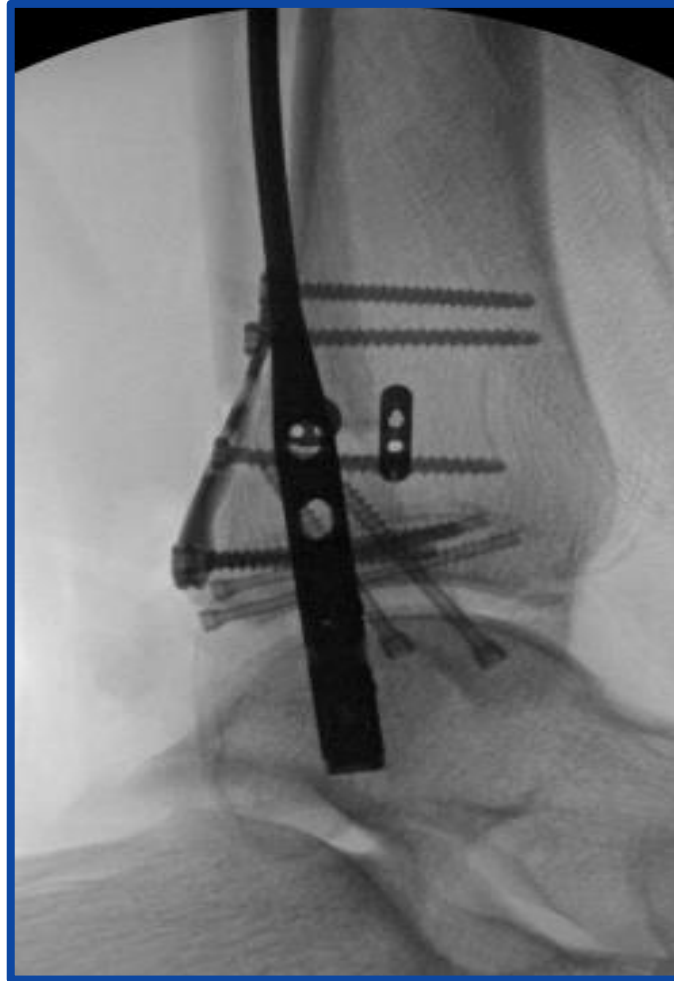


'OWN THE ANKLE'
PAOS, 2019

PRONE WITH PL APPROACH



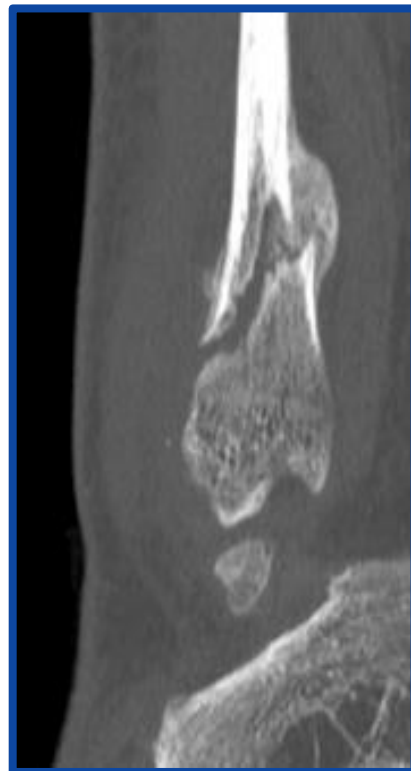
PRONE WITH PL APPROACH



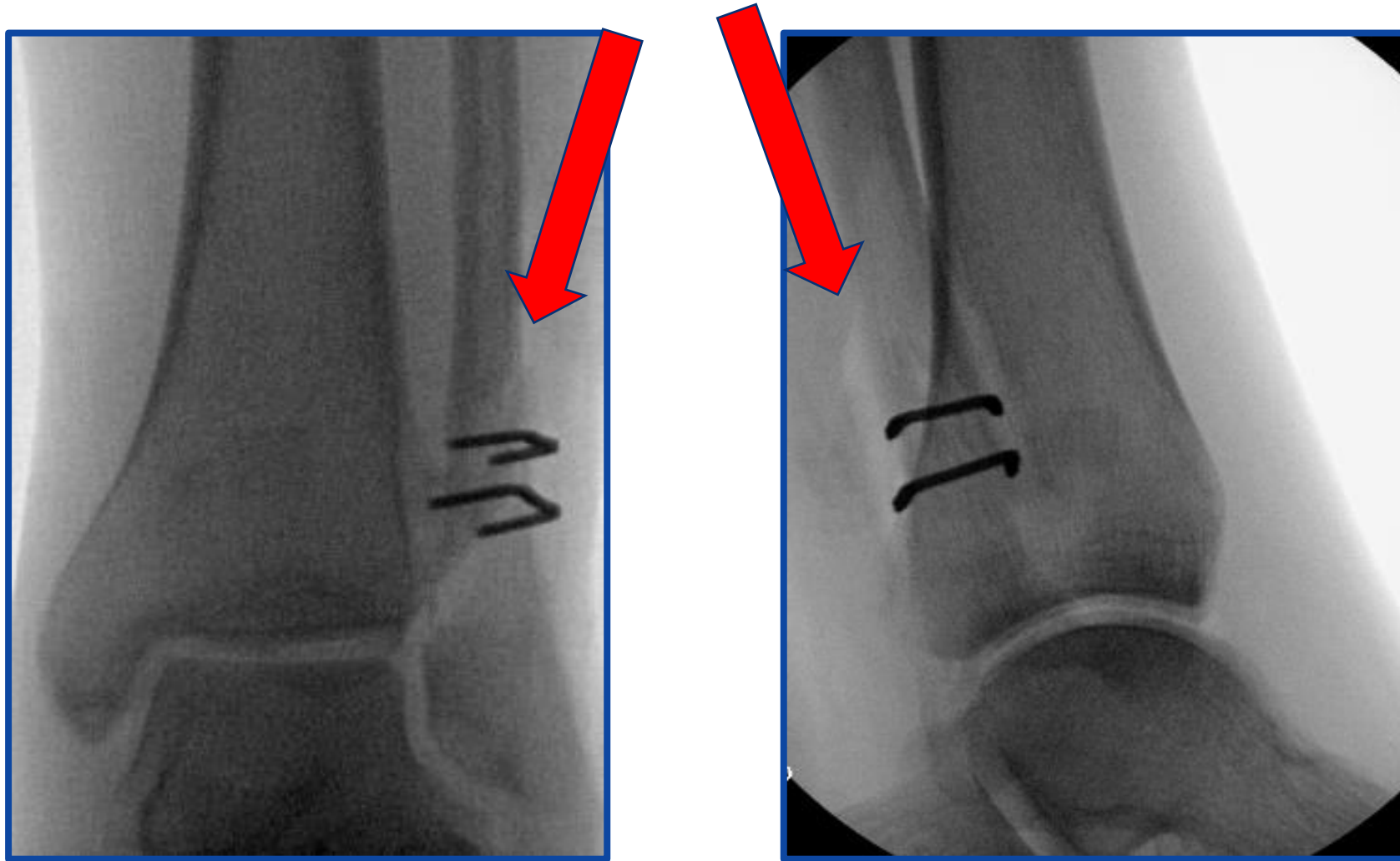
PRONE WITH PL APPROACH



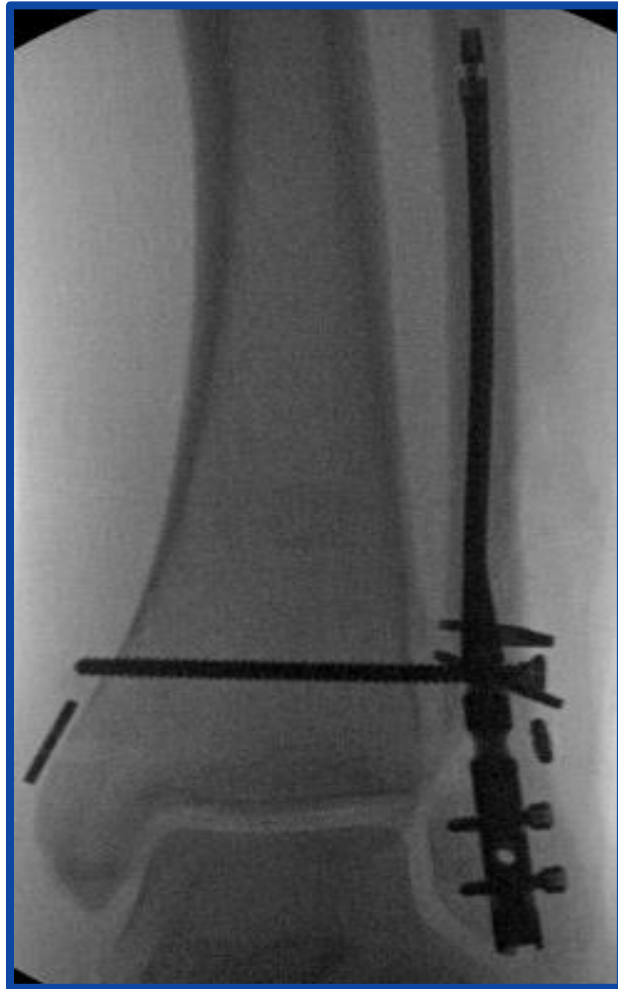
NON UNION: FIBULOCK AND DYNANITE



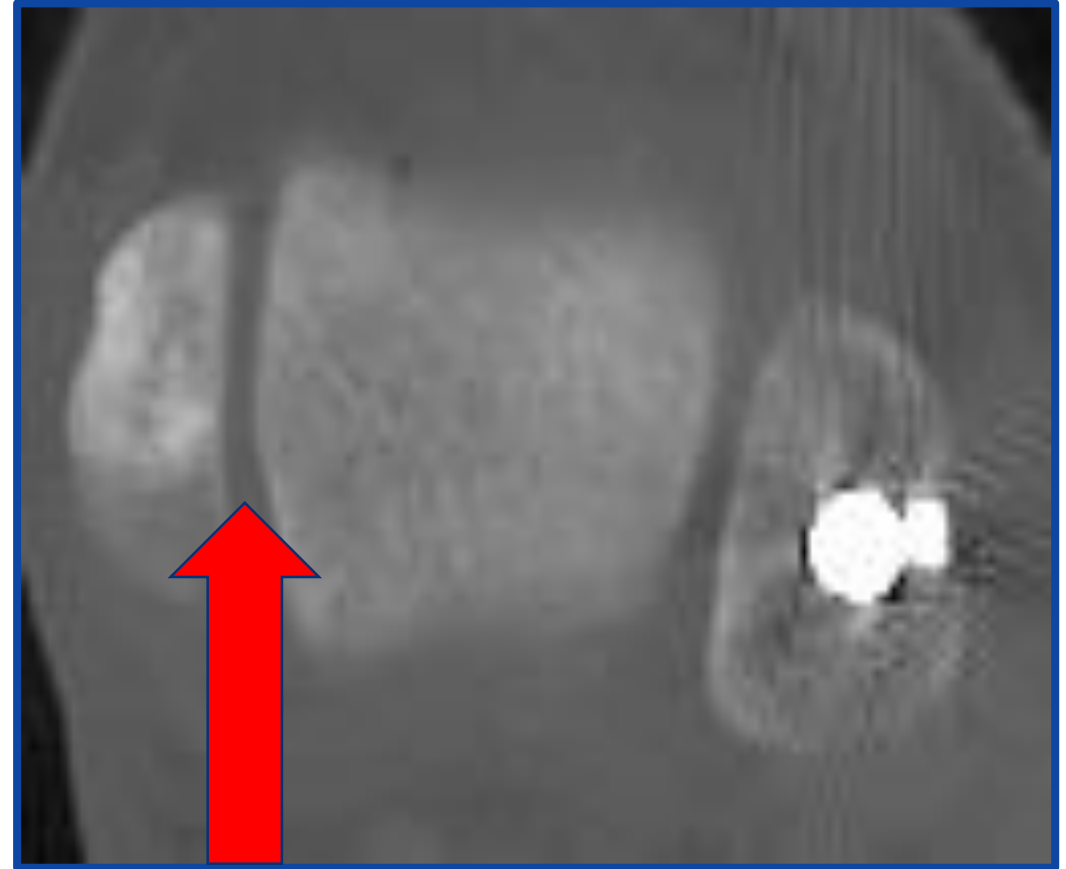
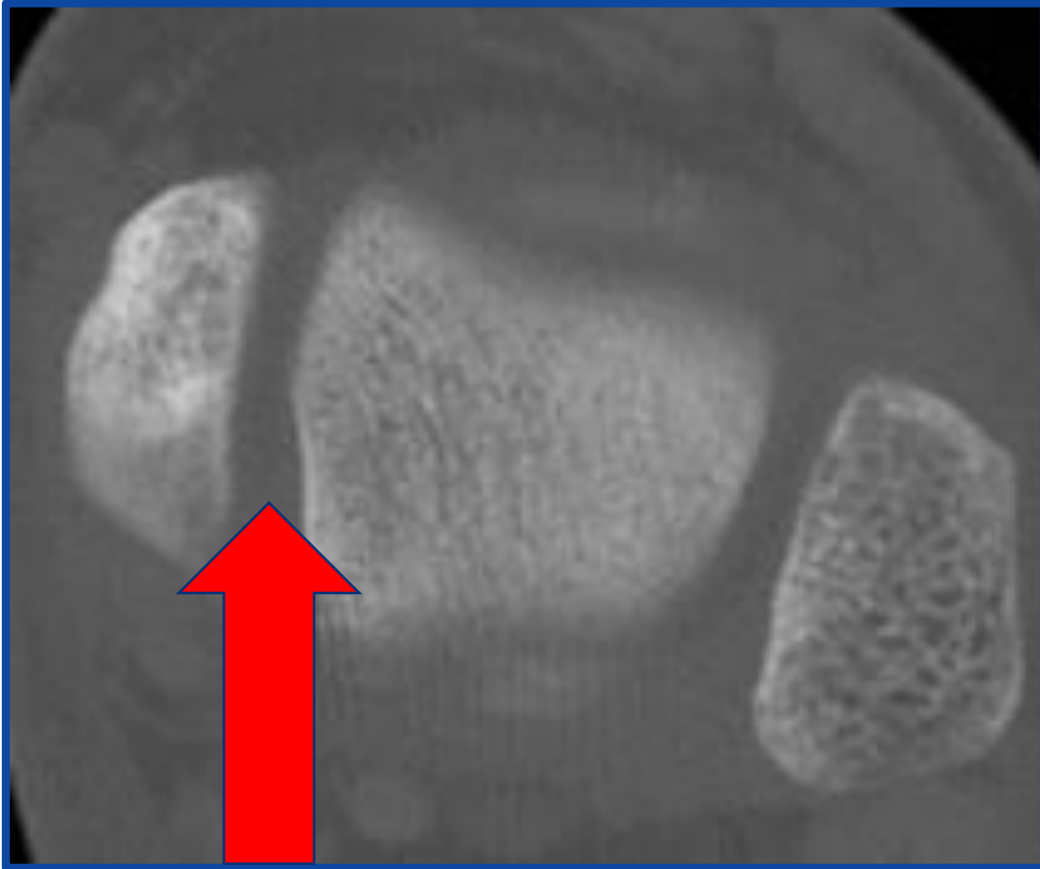
OUT TO LENGTH AND COMPRESSED



NAIL AND SDS FIXATION



PRE AND POST OP CT



PRE AND POST OP CT



IMPORTANT:

FIBULOCK FITS ALL!

SUMMARY

THE FIBULOCK HAS REVOLUTIONIZED MY PRACTICE

IT IS MY TO GO TO FOR EVERY ANKLE FRACTURE

MY PATIENTS LOVE IT!



THIS MADE ME SMILE:



1

My therapists
are calling me
COMPLAINING!

2

My old plate and new
nail patients have to be
SEGREGATED at
therapy to avoid:

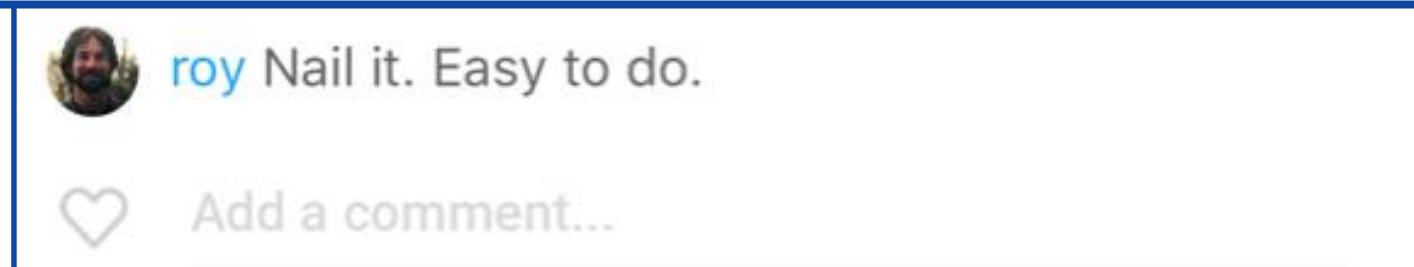
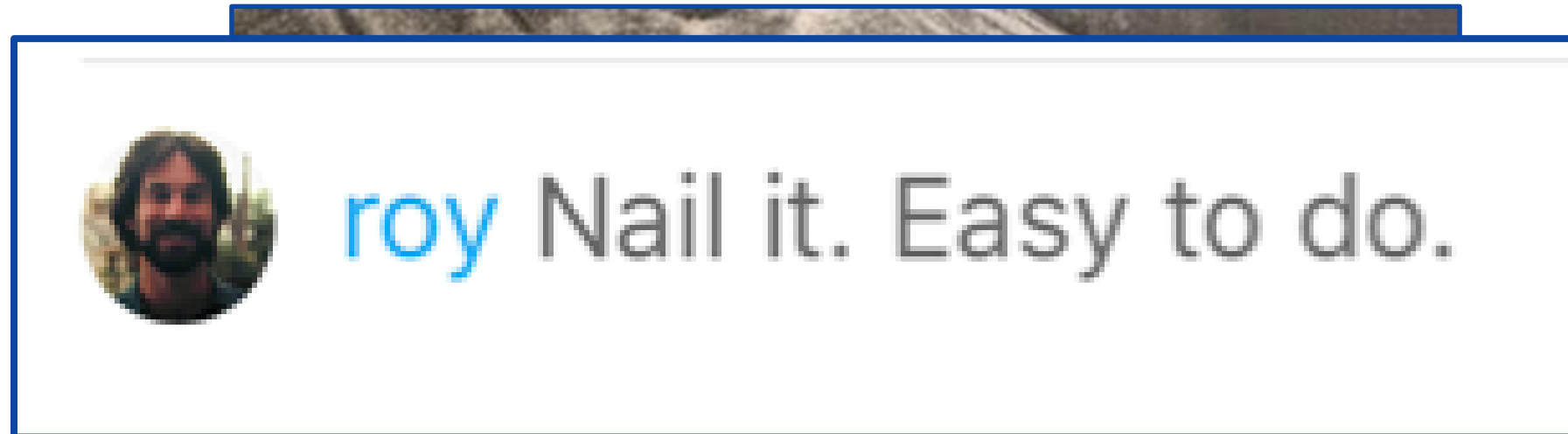
'INCISION JEALOUSY'

'PLATE SHAMING'

3

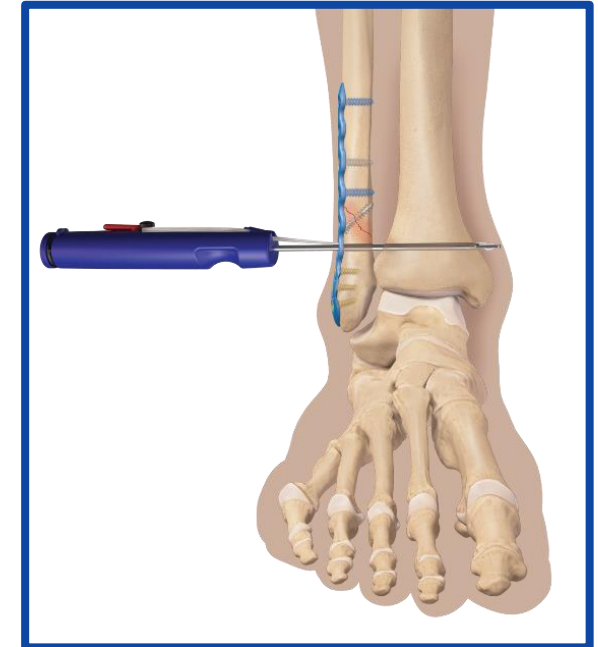
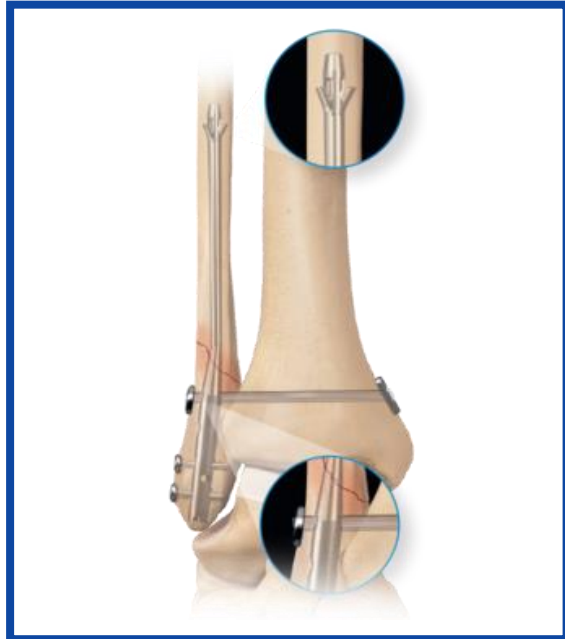
When I see my old
plate patients for
follow up, I'm
disappointed that I
didn't adopt the nail
SOONER!

ROY SANDERS BLESSING:





FUTURE?



THE FUTURE (IS HERE)

I FIRMLY BELIEVE THIS WILL BECOME GOLD STANDARD!

**YOU WILL TOO WHEN YOU GET YOUR HANDS ON THIS AND START
SEEING THE RESULTS**

THERE IS NO DOUBT THAT THIS IS A BETTER WAY TO DO IT

CONCLUSION

ANKLE FRACTURES ARE COMPLEX INTRA ARTICULAR INJURIES

A COMPREHENSIVE APPROACH IS REQUIRED

THE FIBULOCK HELPS US TREAT OUR PATIENTS BETTER...

CHALLENGE

'OWN THE ANKLE'

**NAIL THE
'ALL INSIDE ANKLE'**

And if you need even more convincing and help, I have a lot more where this came from:

CWH@CWHMD.COM

305 302 1272

THANK YOU!

Quick video to wrap
up...

FibuLock Technique Video

CHRIS HODGKINS, MD, 2019