

The Department of Orthopaedic Surgery  
University of California San Francisco School of Medicine

# UCSF Arthroplasty for the Modern Surgeon: Hip, Knee and Health Innovation Technology in Wine Country

**PROGRAM CO-CHAIRS**

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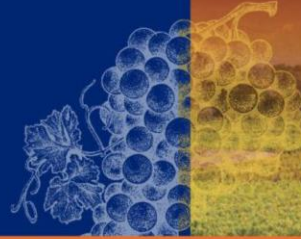
Associate Professor of Orthopaedic Surgery  
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Friday - Saturday

**September 20-21, 2024**

Silverado Resort and Spa • Napa, CA

2024



UCSF

# Revision Total Hip Arthroplasty Cases

Moderator: Jeff Barry MD

September 2024

# Disclosures

- Consulting:
  - Smith & Nephew
  - Onkos
  - Depuy
  - Lineage Medical
- Institutional Fellowship grants: S&N, OMeGA, AAHKS

# The Announcer's Jinx

Last time on Arthroplasty for the Modern Surgeon in Napa 2023.....

# Case – You're Screwed 2023

## History

- 47F
- MVC at age 15 resulting in R THA. 3 revision since unclear reasons - last 2002 outside US
- Cane and worsening pain x6month since a fall
- PMHx/PSHx:
  - o/w healthy; no meds

Exam: Ht: 5'1 Wt: 160lbs BMI: 30

Trendelenberg gait with cane

TTP about the hip

Well healed large posterior incision

1cm LLD

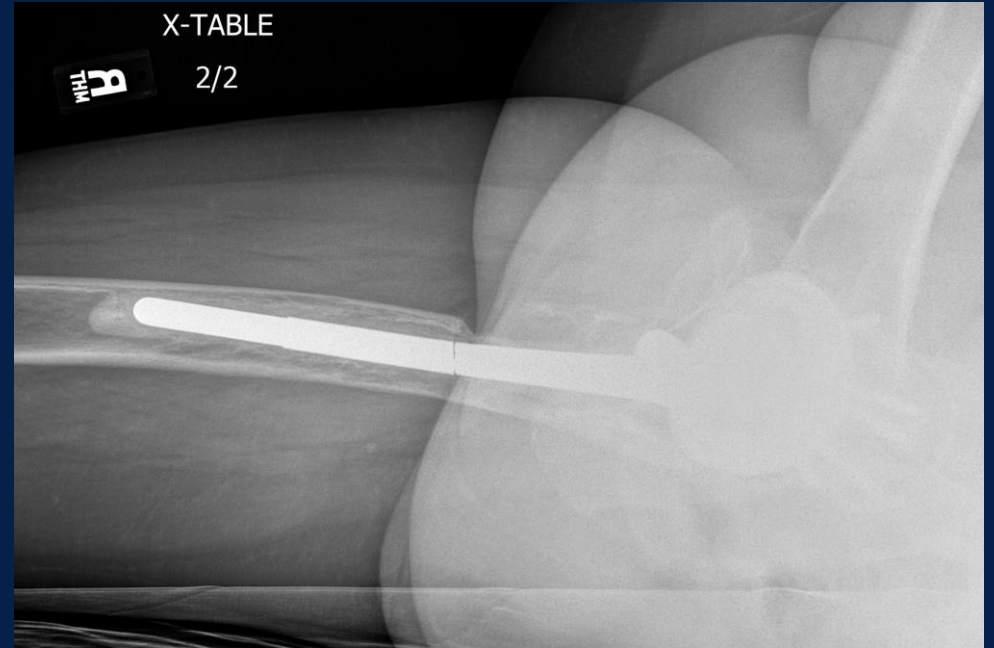
DNVI



- 3+ yrs out
- Works as cleaner
- Same preop trendelenberg gait
- No longer in ex-screw-ciating pain



# THE NEXT MONTH....



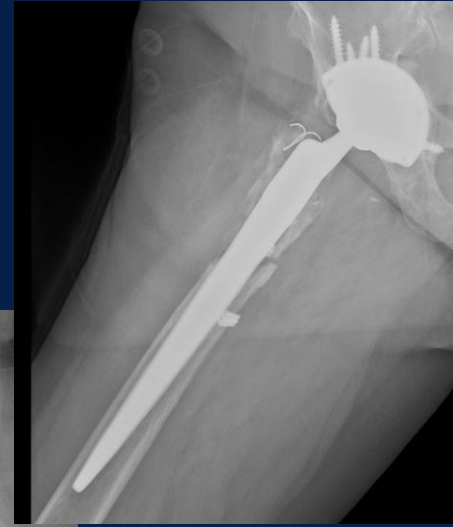
## Discussion Points

- Broken stem; modular modern cup
- How to plan for this in the OR?
  - What do you have in room?
  - Special techniques expected?
- Fixation strategy
- Socket management?





# Outcome



When it rains, it pours...

# Case – When it rains, it pours...

## History

- 67F s/p R THA 2 years ago OSH via anterior approach
- Multiple episodes instability
  - Revised x2 both via posterior different surgeon (last 4mo ago)
  - Head lengthening then conversion to DM
- Now 2 additional dislocations (one chair; one standing)
- PMHx: DM (5.9a1c); HTN, hypothyroid

**Exam:** Ht: 5'6 Wt: 168lbs BMI: 28

Healed anterior and posterior incisions

Antalgic gait with walker

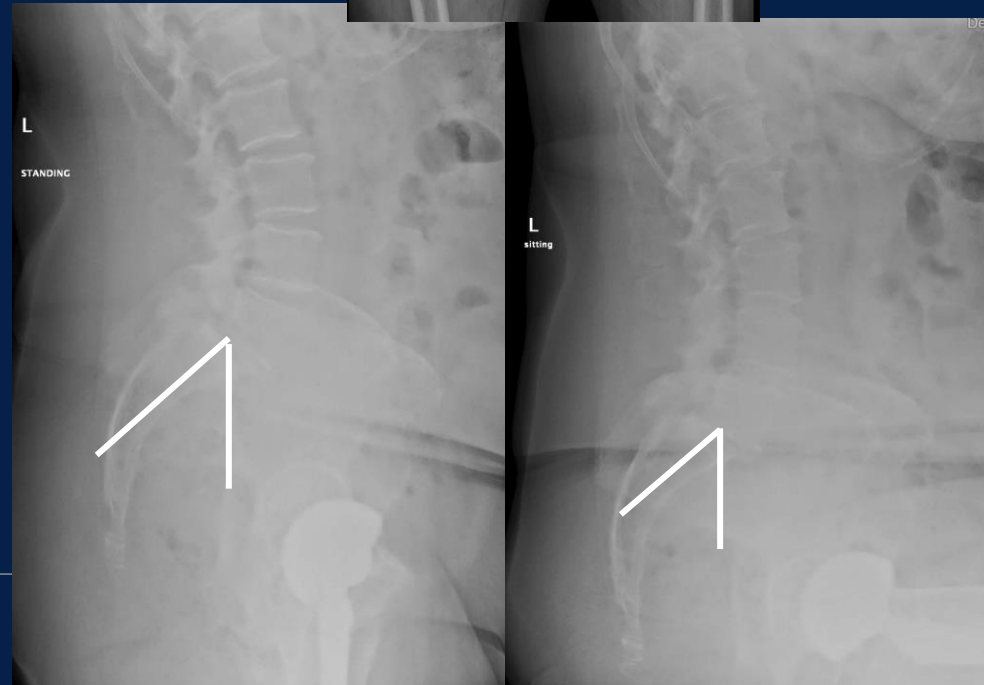
Intact abductor

DNVI

Last ED visit picture  
Multidirectional instability  
workup?



- Anyone getting sitting/standing films for instability workup?
- Does two approaches previously change thinking about what to do?
- Instability plan



# Workup

- ESR 2 (nl <35)
- CRP 16H (nl <8)
- Co/Cr both <1
  
- Aspiration
  - 50k WBC 89% PMN (60kRBC)
  - Culture negative our lab
  - Alpha Defensin +
  - MSSE on Synovasure culture

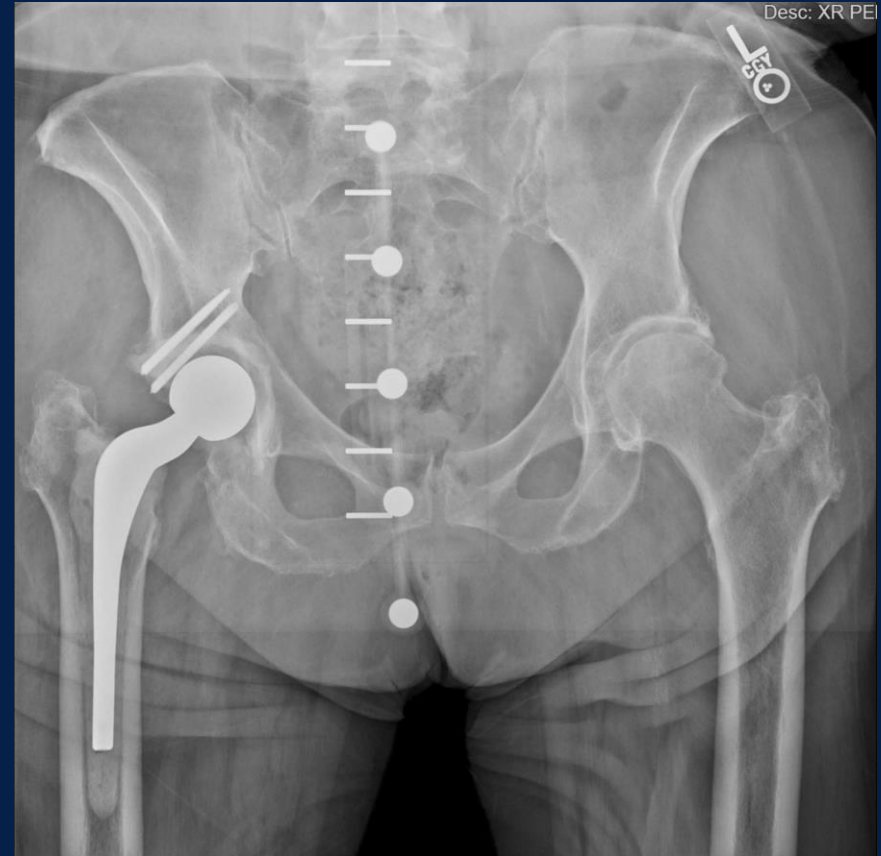


# Infection Treatment

- DAIR vs 1 vs 2 stage?
- Static vs articulating spacer?
- Have you changed anything intraop for infections last few years?

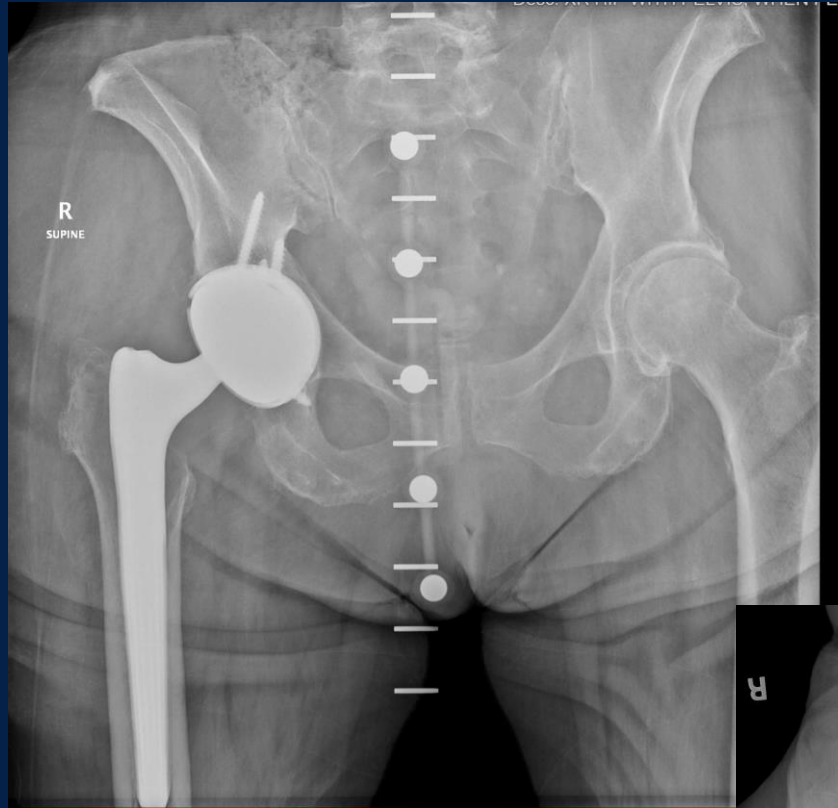
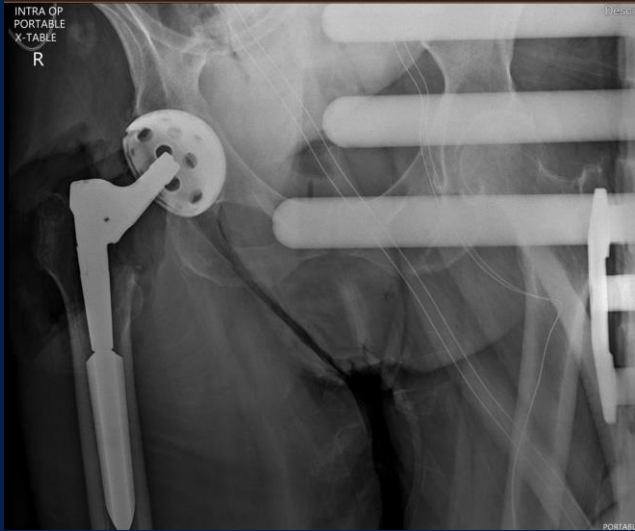


- Articulating spacer
- WB?
- When to reimplant?
- What bearing reimplanting with?





# Outcome



You're saying I'd still need a shoe lift?!

# Case – You’re saying I’d still need a shoe lift?!

## History

- 58M h/o HIV, DM2, bilateral hip AVN presents for R hip eval
- L THA 2015; R THA 2010 c/b late PJI and girdlestone 2yrs prior to presentation (no spacer attempted)
- PMHx: DM (5.7 a1c); undetectable viral count
- Works desk job and doing night school

**Exam:** Ht: 5’6 Wt: 175lbs

Healed posterior incisions  
4”+ LLD

Forearm crutches or wheelchair  
DNVI

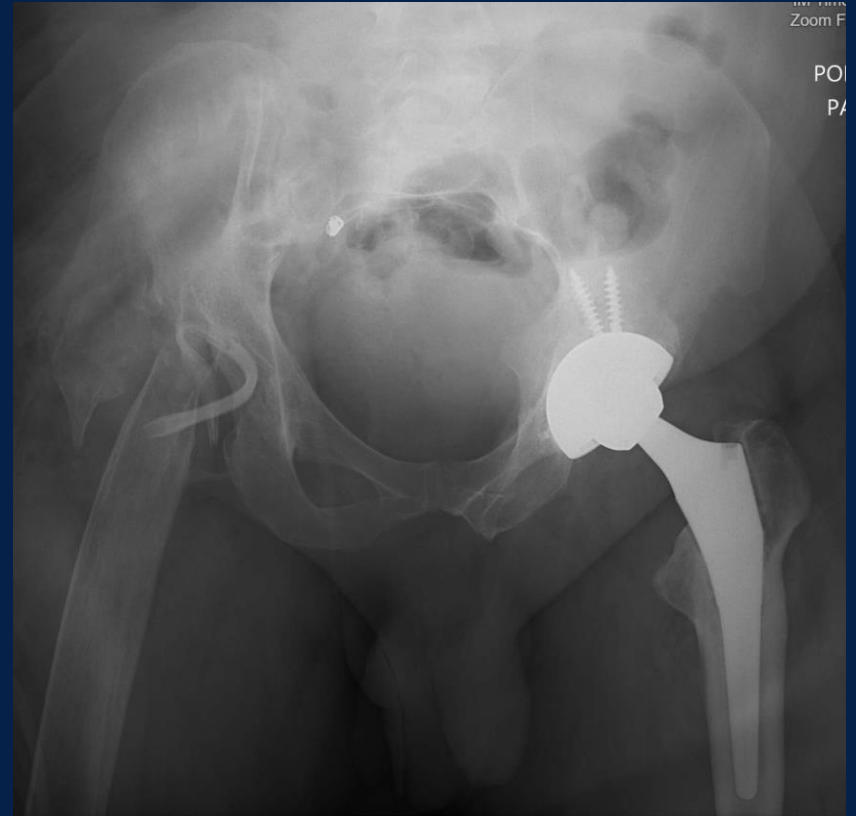
Anything you offer him?  
He breaks you down and  
you are considering  
reimplantation – workup  
preop?



- CRP nl
- ESR 100
- Aspiration 4cc
  - 0WBC...
  - Alpha defensin neg
  - Culture neg
  - Staph Microbial ID panel POS
  
- Pain isolated to R hip



- Open biopsy
- Nothing concerning looking
- Cultures x6 all negative
- Ok to reimplant now?



# F/U Post-Biopsy

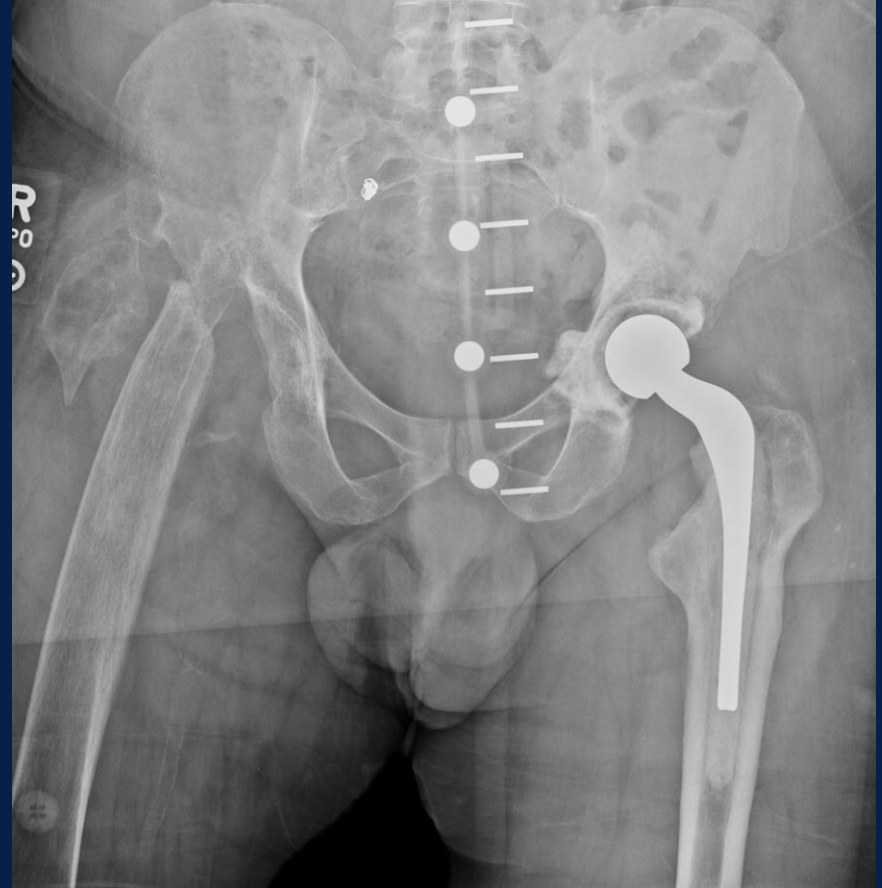
- Initial presentation



- 6mo later (post-biopsy)



- L hip painless – his good side...
- Aspiration purulent +MSSA
- 2stage - exchange





Ok thanks Doc

But now can we take  
care of the right  
side....





- 1yr postop
- Walks with crutches or walker but still prefers wheelchair
- Dissatisfied still needs significant external shoe lift ~2"
- Chronic antibiotics? Post-reimplantation protocols?

# Case: Kid's Do the Darndest Things

# Case – Kids do the Darndest Things

## History

- 14M from rural central Ca presents with R hip pain
- s/p fall ice skating in Tahoe 3years prior and perc screw fixation of fracture
- Parents complain of odd posture, inability to ambulate and strange gait when he tries last year
- No known medical issues

## Exam

- 5'8" 145lbs
- Severe R hip adduction contracture
- Stands with R leg ~6inches off the ground and says unable to bear weight on it
- Visible scoliosis
- Crutches to ambulate



- Workup?
- Adductor contracture management?
- Cup placement?
- Stem choice in screw conversion





# Mississippi Madness

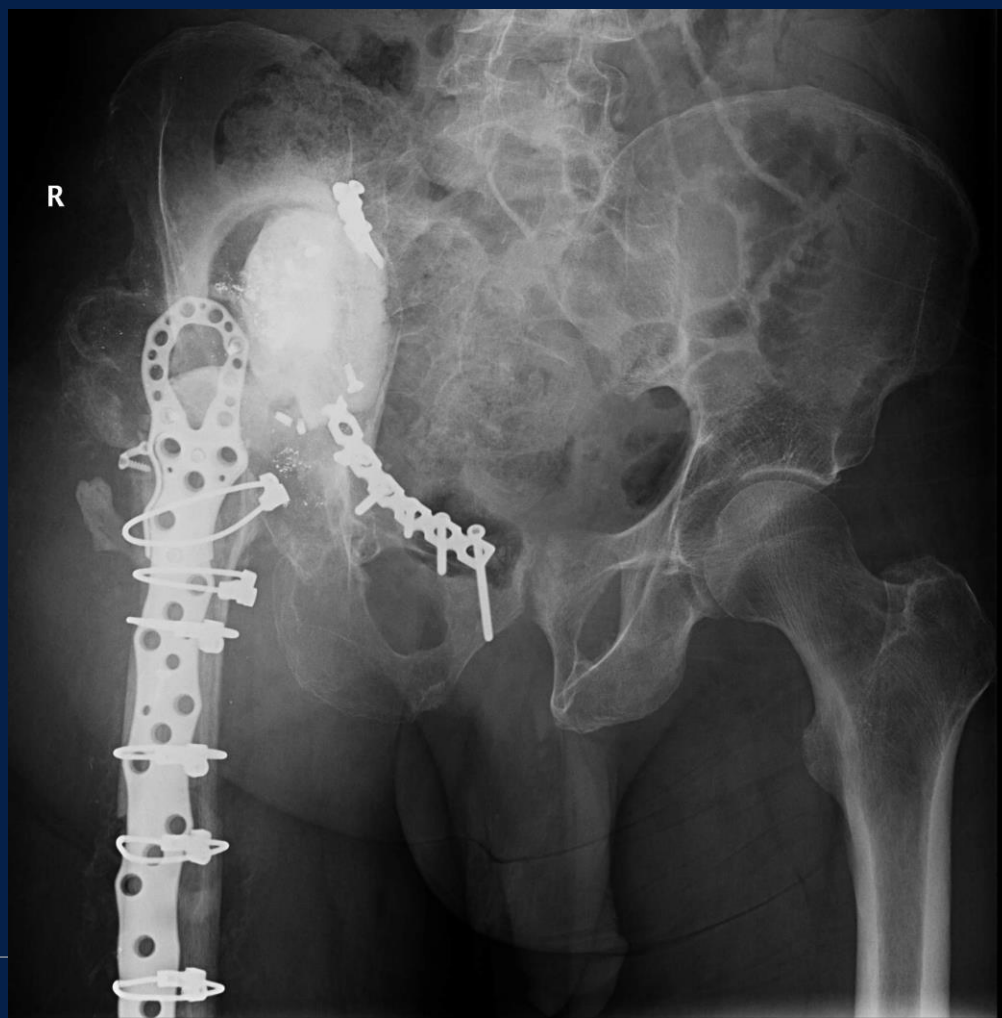
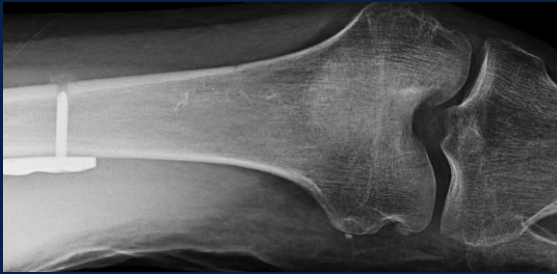




# Case – Mississippi Madness

## History

- 55M s/p MVA while driving his truck in Mississippi 3mo prior
  - “Had a bunch of surgery there and they said maybe I had an infection” and then told get taken care of back home
  - Hip always hurt but ambulatory with limp – now non-ambulatory
- Pelvis fracture ORIF 1998 converted to R THA 2000. Later revised 2009 for acetabular loosening
- Oxy 30q4 chronically
- No diagnosed active non-orthopaedic issues (avoids medical care except for his oxy)





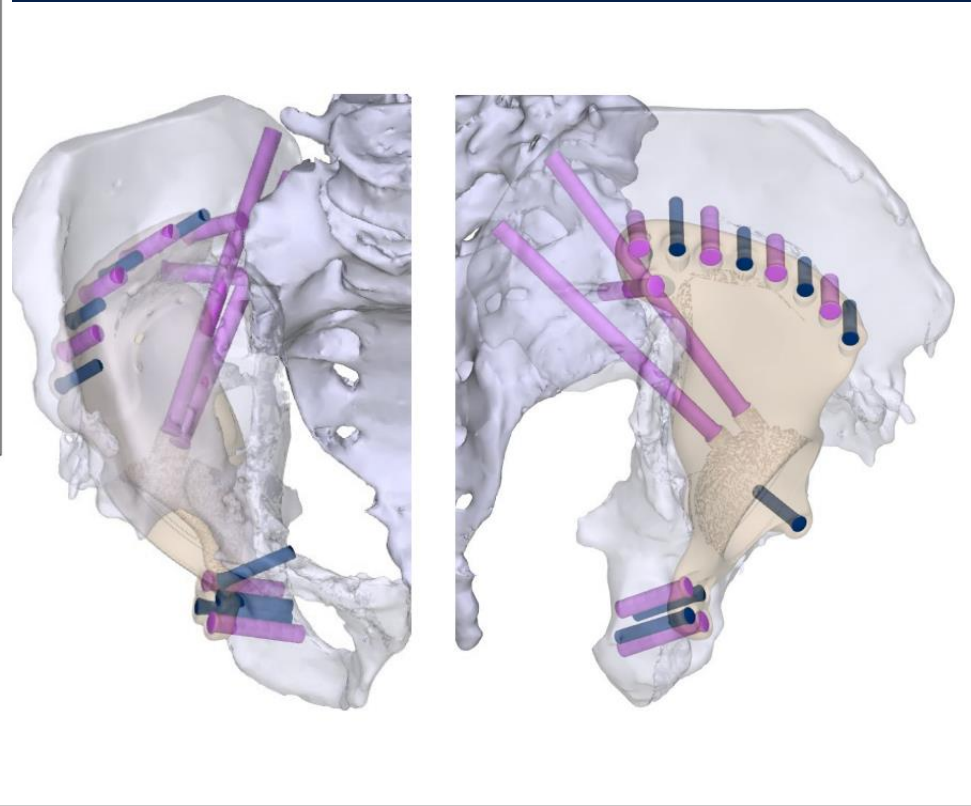
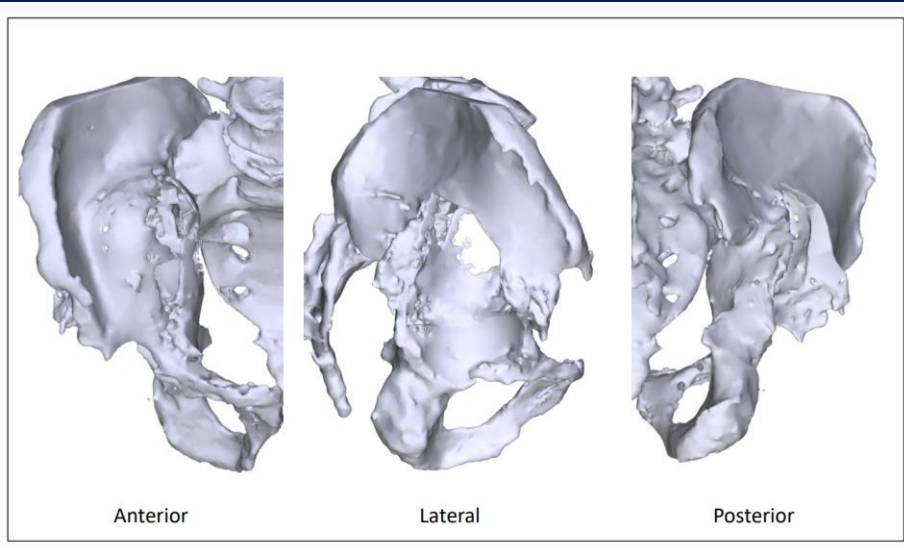
- All cultures negative from MS hospital
- Was discharged with dx of infected hip but no antibiotics and told to f/u in California
- Last xray from 2010
- What do you think happened?

- Op no [unclear] [unclear] hip with p [unclear] fracture - loos [unclear] and well f [unclear] with femur [unclear] ORIF [unclear] place [unclear].



- Now what? (briefly)
- Rule out infection (multiple times)
- Figure out how to reconstruct
- What is your support network for tough cases?





# Outcome



The worst enemy of good outcomes....

# Case – The worst enemy of good outcomes...

## History

- 70M h/o B THA 1992
- Worsening pain x months – saw **ORIGINAL** surgeon 30yrs postop and referred to me
- Now few weeks of severe pain with ambulation and grinding sound
- PMHx: CAD s/p bypass (Plavix+ASA); HTN

**Exam:** Ht: 5'5 Wt: 210lbs BMI 35

Healed posterior incisions  
Grinding sound with ROM

Wheelchair 2/2 pain  
DNVI



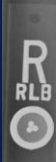
Desc: XR HIP WITH PELVIS, WHEN PE

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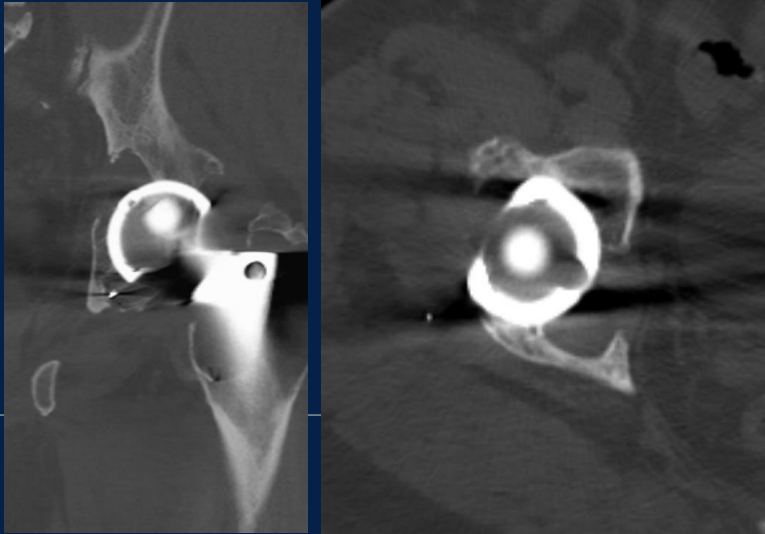


Dear Dr. Barry:

I am writing to ask you to possibly take care of my patient, [REDACTED]. I have enclosed in this letter a copy of my note from [REDACTED]. [REDACTED] is in need of revision surgery on his left hip replacement, where he has significant osteolysis, particularly involving his superior and posterior column of his pelvis and proximal femur and I believe that this needs revision by an expert with greater experience and present revision volume compared to what I do now at the tail end of my career. [REDACTED] and his wife are wonderful people and patients. I have heard terrific things about you and your work including the recommendation from [REDACTED] and would certainly appreciate you taking on this potentially difficult problem for a nice patient.



- CRP nl
- ESR nl
- CT 6mo prior to presentation before eroded through – large retroacetabular lysis





- 1yr postop presents to clinic after unable to bear weight for several days after getting out of a chair at home





- 6mo post closed reduction; 1.5 postop
- Normal inflammatory markers