

Arthroplasty for the Modern Surgeon: Hip, Knee and Health Innovation Technology

FAIRMONT SONOMA MISSION INN SONOMA, CA

Revision Total Hip Arthroplasty Cases

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Arthroplasty for the Modern



Disclosures

- Lineage Medical content editor, investor
- Depuy course teaching
- Smith&Nephew consulting

- All my cases so you feel free to get judgy...
- For most part skipping the cages, triflanges etc



CHOOSE YOUR OWN ADVENTURE

How to say "F* You" in Tagalog

My prior surgeon said this will cost \$90k cash

A gift from Dr Larry Dorr (don't pick this one unless you are retired)

You're screwed

What do you mean I can't fly back to my island?

Did anyone bring some duct tape?



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Case - Philippines

<u>History – presents 2019</u>

- B THA in Philippines 2012 L / 2013 R
- L revised 2014 femoral loosening; R revised 2015 acetabular loosening
- L washed out 2014 reported acinetobacter – draining ever since; R started draining 2017
- Moved to US 2019

- PMHx/PSHx:
 - CHF
 - CAD
 - Breast Ca s/p resection
 - Lumbar spinal fusion L4-L5

Exam: Ht: 5'3 Wt: 110lbs BMI: 19

Wheelchair bound – short distances with walker

Draining sinuses R open currently – L with 2cm blister (drained a few weeks ago)

Pain with hip ROM

DNVI



- ESR >100; CRP 30.7mg/L
- Aspirations 44kWBC R; 5k
 L; 100%PMNs bilat
- L MRSE; R enterococcus

- Other studies before surgery?
- Timing for bilateral chronic infection?
- Articulating vs static?

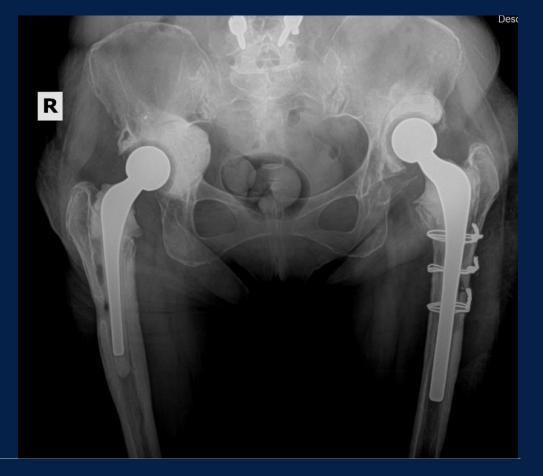


 Has 4 vessel MI 1 week before planned explant – 4 stents placed. Needs dual anti-platelet therapy minimum 4 mo.

- Proceed? Wait? Change timing discussion?
- What blood thinners will you operate through in revision hip surgery?



- Waited til off DAPT; Staged 4 weeks apart articulating spacers
- L required ETO to clear all distal cement
- Smallest spacers barely fit*
- When we safe to go back in?
- Reconstruction plans
 - Timing?
 - Implants? Fixation type? Size considerations?
 - Does spine come into consideration at all for revisions?
- Abx protocol post reimplantation?



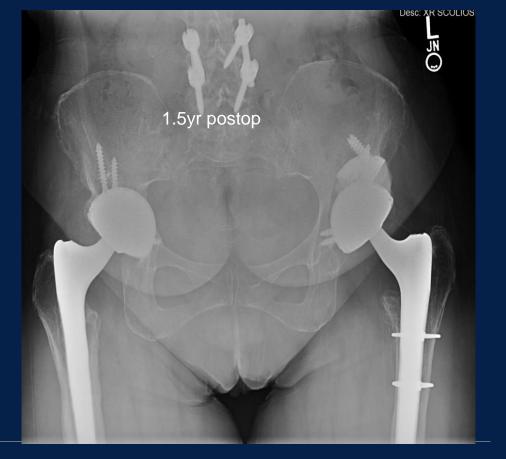
Replants 6 weeks apart

L required take back
7days postop for
persistent drainage in
wound vac —
hematoma
evacuation

Trigger for take backs?



- Walking with cane only long distance
- Normal markers off abx
- Some persistent chronic L foot radicular symptoms and occ bursitis L hip pain







Case - Cash Only

55M Spanish speaking s/p R THA anterior 2005. Always felt short on that leg. Last 6 years worsening groin and thigh pain. 5 years ago told needs revision for something but his surgeon had become cash only and quoted \$90k out of pocket. Avoided care because worried about costs. Works as truck driver.

PMHx/PSHx:

- Depression; HTN

Exam: Ht: 5'5" Wt: 185lbs BMI: 30

Antalgic gait

Neg Trendelenberg

Pain with stinchfield

R leg ~1cm short

DNVI



Dx? Further studies?

- Co 4.6; Cr 6
- ESR/CRP normal

 MRI OSH poor quality but abductor looks intact – can't tell pseudotumor or not due to artifact



Surgical approach?

What to change?

Special counseling for MoM revisions?

• Would you put a DM liner in this cup?



- Black staining
- Corrosion back of liner and trunnion
- Abductor healthy
- Stem fixed but revised given significant proximal bone loss

1.5yrs out – doing all activities. No hip pain. New surgeon made \$90k less than original surgeon



Case - Screwed

<u>History</u>

- 47F prior care in Mexico.
- MVC at age 15 resulting in R
 THA. 3 revision since unclear reasons - last 2002
- 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



What am I looking at?

Further workup or studies?

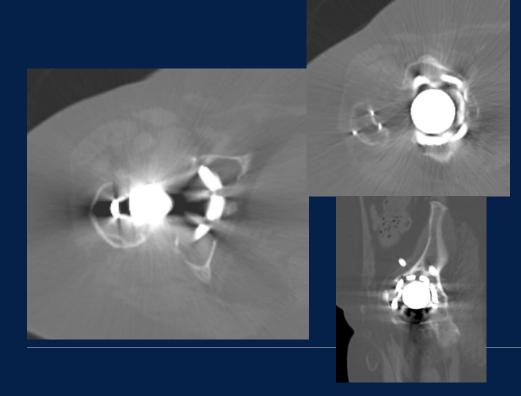
Plan?

Approach to acetabular bone loss cases?



No op notes

CT showed lysis but intact columns





- Stem well fixed
 - No possible head tapers would fit on it (tried everything)

 – reused old 32 head
- 66cup in 5'1" person
- 32 liners didn't exist for cup size
 wanted modular incase stem
 revision future cemented
 smaller modular cup with 32 liner
- How much difference will you tolerate in head taper?
- Postop restrictions?



- 2.5yrs out
- Working again as cleaner
- Same preop trendelenberg gait





Your rep sends you a text:

Hey do you mind seeing a long family friend of mine? She's having some trouble with her hip recently. Had surgery with Larry Dorr a few years ago.

Me:

Of course, we will get her in

Wait - was Dr Vail too backed up?



 Squeeze her into end of the next clinic. You look at xrays before going into the room....







Case – The Gift

- 63F s/p 11 R hip surgeries.
 - First 21yo "hip didn't develop right"
 - Last "major revision" 2016 Dr Dorr
 - 2 revisions since for dislocation new constrained liner each time
 - Feels always getting shorter on that leg
 - Last few months worsening pain with WB in groin, lateral hip, thigh, knee
 - Worsening swelling
 - Feels something rattling in her hip
- PMHx:
 - Breast cancer s/p mastectomy

Exam: Ht: 5'3" Wt: 120lbs BMI: 21

Needs crutches to walk – toe touch only on the R.

Well healed length of thigh lateral incision

Palpable fluctuance around the hip joint

Weakness entire proximal muscle girdle

Distal NVI

Full Painless Knee ROM

4cm short on R



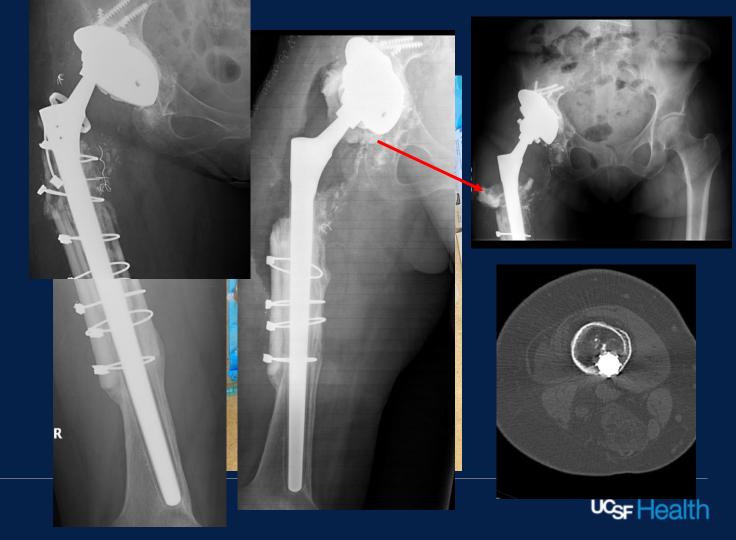
Where do you begin?







- Aspiration
- Labs
- Get old films
- New CT pelvis and femur



- Nothing grows!
- Normal ESR/CRP
- Repeat same results!

Summary

- Constrained liner socket h/o multiple dislocations
- Subsiding stem halfway out back of femur
- New worsening pain and chocolate milk effusion
- Loose cement chunk



Plan total femur

 Knee portion first so have something to support while prepping tibia and dissecting distal femur

 Go to hip portion - knock liner out of cup to dislocate hip – entire things moves....











Long term 5mo f/u films

- Ambulatory using single crutch
- Biggest complaint is persistent proximal weakness
- Knee actually tolerated things very well
- All wounds healed
- All cultures were negative
- Encouraged her to consider moving to Gainesville, FL



Case – Private Island

History

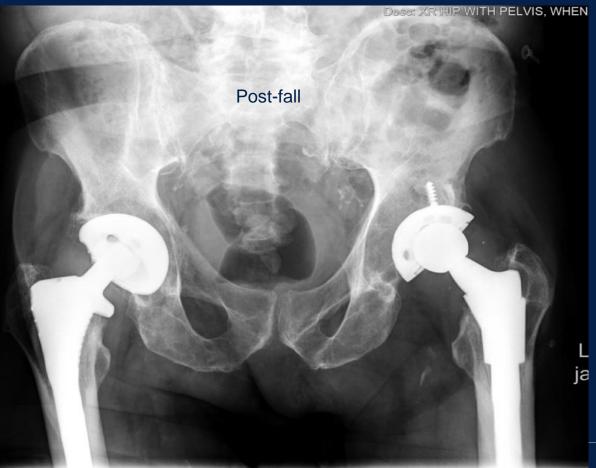
- 84M s/p B THA 1995 (L rev 2014 for wear and recurrent dislocations) presents to ED after fall while hiking, L hip pain and inability to ambulate. Hip doing fine since revision (1 dislocation 2018 while putting on SCUBA gear in Indonesia closed reduced). Former CEO very large company
- Asking how long he'll be in hospital because he has a several month trip to his private island coming up.
- PMHx:
 - Paroxysmal afib (on elaquis)
 - HTN
 - Pulm HTN

Exam: Ht: 6' Wt: 160lbs BMI: 21

On gurney
No other injuries

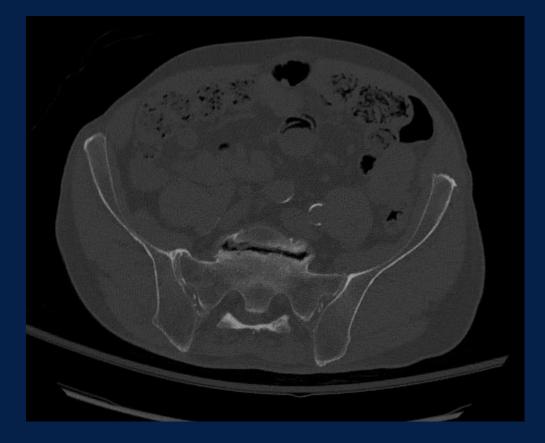
Pain with logroll and hip ROM Healed posterior incision DNVI

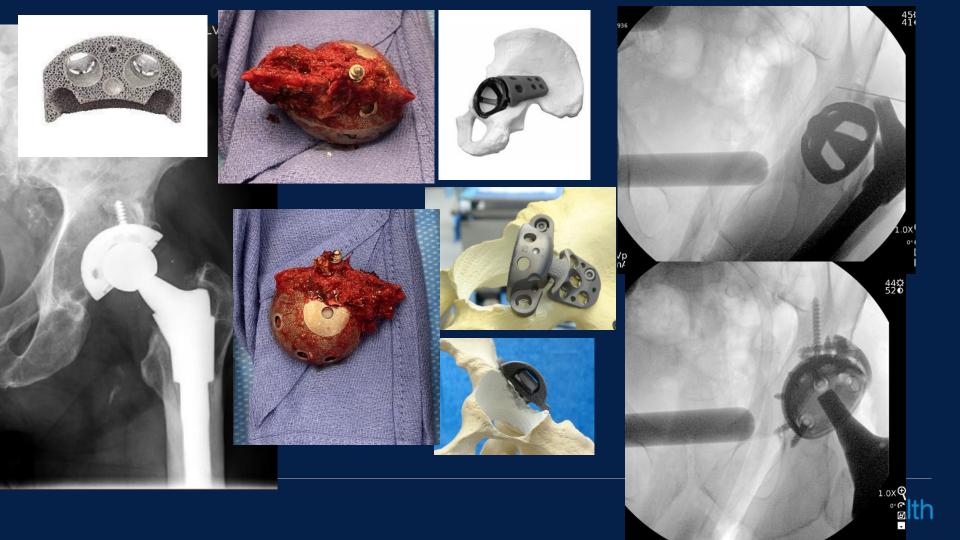




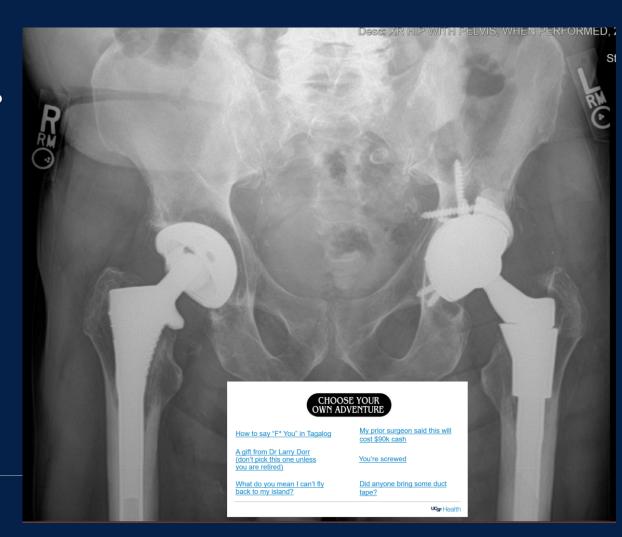


- Need CT scan?
- What's the elaquis play here?
- Demanding patients how to manage? "Please call these 4 doctors and review my case with them"
- What are you telling him about risks? recovery? Long-term?
- What you bringing into OR?





- WB restrictions after acetabular reconstructions?
- Hip precautions and duration?
- How long until flying?
 - What if its to your private island?
- 1.5 yrs out. Walks and swims 2hrs daily.
 Complains never regained activity level of preinjury



Patient – Duct Tape

<u>History</u>

- 92F transfer OSH with R femur fx.
- Independent apartment at long term care facility (nurse check 2x/day) presents after fall in shower 2 days. Previously used walker
- R THA 2011 followed by 2 subsequent periprosthetic fxs s/p revision 2014, 2016. No records.
- PMHx:
 - Heart failure
 - Sinus brady
 - HTN
 - Chronic edema
 - DNR

Exam: Ht: 5'5 Wt: 160lbs

Gurney nonambulatory

Obvious R femur deformity

No open wounds

Healed lateral based scar length of thigh

DNVI



 Resident: I added on for you tomorrow and told front desk to ask for your normal revision hip stuff

- Preop optimization?
- Fix, revise, replace?
- Fixation type?
- Management of plate and rest of the femur?



- Implant loose proximal bone a mess
- Retained old liner.
- Merselene tape troch repair
- New ppx plate (placed around trial then cement in real stem)
- 1yr out. Had a pacemaker placed a few months ago.
 Walker around the care facility. Biggest complaint is her hemorrhoids

