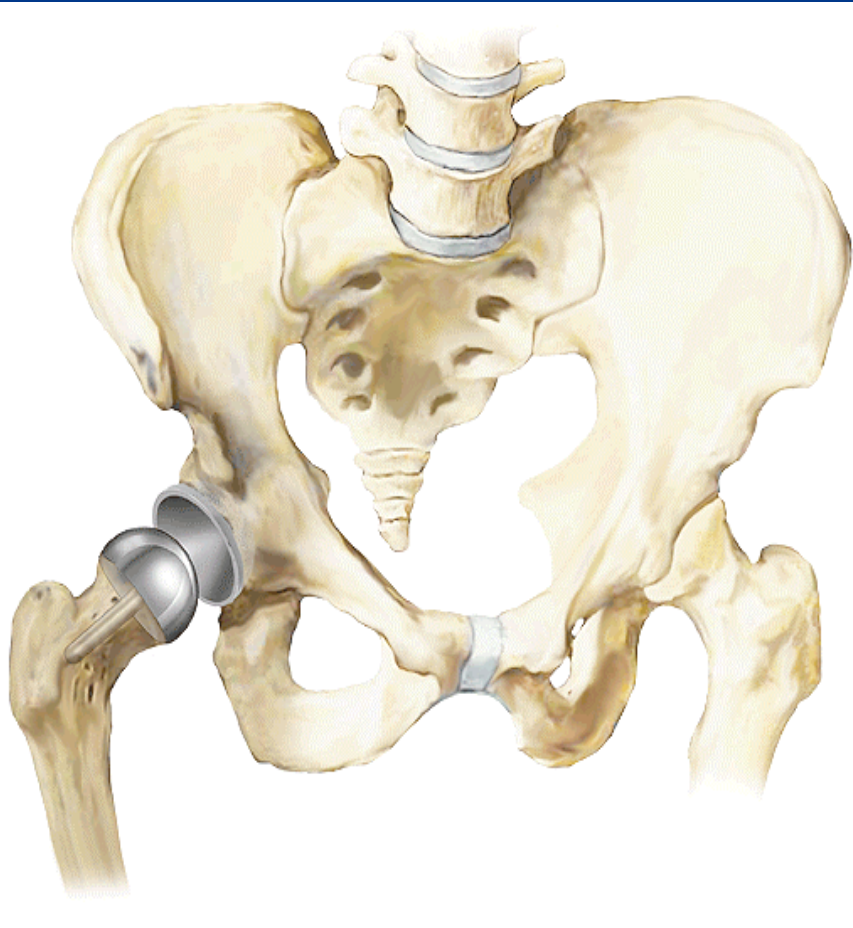


Hip Resurfacing



- ✓ The end of the femur is capped somewhat like a tooth cap
- ✓ The hip socket receives a cupped implant to move together to restore the joint
- ✓ Hip Resurfacing has been around for more than 30 years

“Keep Me Active”



Hip Resurfacing has been one of the most important innovations in orthopaedic surgery of the last few years, offering younger, active patients the possibility of a normal lifestyle, without fear of wearing out their implant. **With these claims why would you want anything else??**

http://www.resurfacingofthehip.com/MyHip/hip_theimplant.htm

For the young and active?

- ✓ Proponents say:
- ✓ Easier revision and spares the bone stock on the femur
- ✓ Faster return to activity with less restrictions
- ✓ Low dislocation rates
- ✓ Less invasive

Concerns and Observations

- There is a learning curve with complication rates even higher during this time
- British & Australian researchers identified a longer-than expected learning curve to accurately perform resurfacing. Initially they estimated 10-20 cases however the results showed it took 55-60 cases for most surgeons to get the femoral component where they actually planned it . (1)
- 1-2% femoral fracture rate, similar to cementless femoral THA (Australian experience)
- overall complication rates at least as high as THA
- >1% femoral palsy (nerve injury) early in Amstutz' series, ICL 2007
- other unknowns...metal ions, hypersensitivity, allergic reactions
- reports of lysis (bone destruction) with MOM (metal on metal) articulations
- clicking/squeaking 22.9%, Australian experience - ICL 2007

Contraindications to Metal on Metal Resurfacing

Absolute contraindications

Loss of femoral head (severe bone loss)

Large femoral neck cysts found at surgery

Small or bone-deficient acetabulum (typical in females)

Relative contraindications

Poor bone stock (assessed via DEXA scans)

Chronological age >65 years

Body mass index >35

Use with caution

Patients with rheumatoid arthritis

Tall and thin patient

Female patient

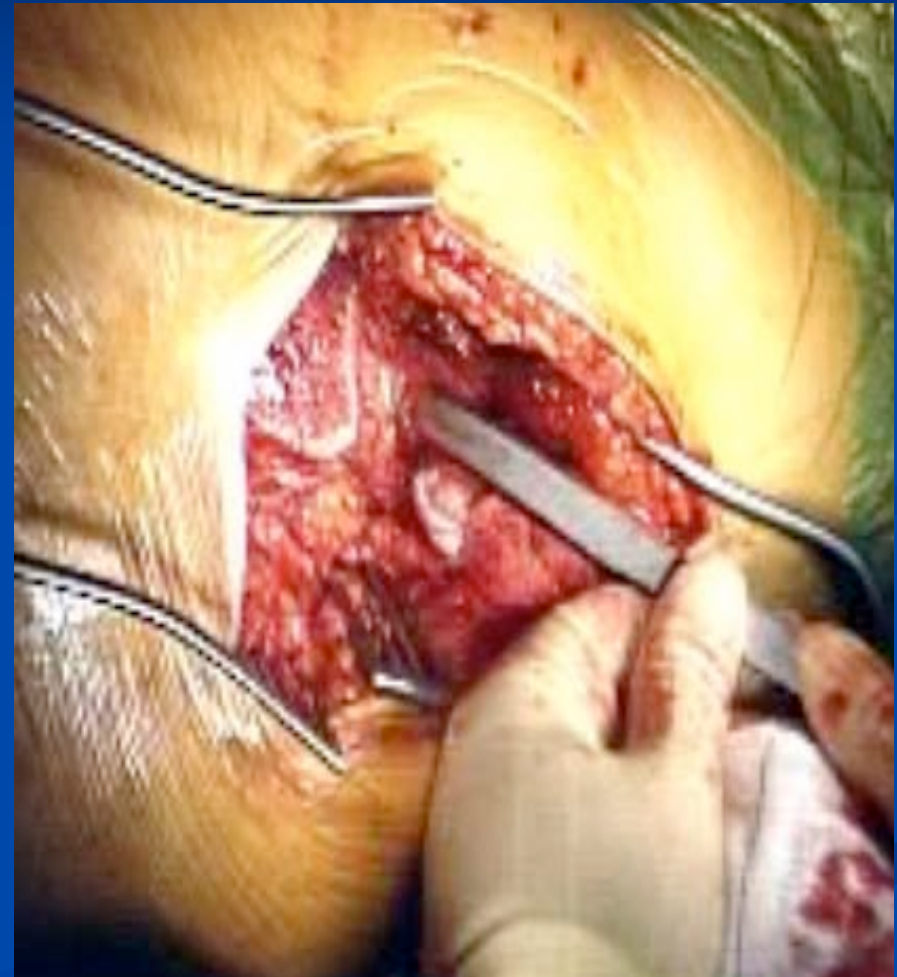
Patient with femoral head cyst >1 cm as demonstrated in pre-op radiographs

Patient with osteonecrosis of the femoral head

Reference Mont MA, Ragland PS, Etienne G, Seyler TM, Schmalzried TP: Hip resurfacing arthroplasty. *J AM Acad Orthopedic Surg* 2006; 14:454-463.

Less Invasive?

- Muscle cutting approaches used
- Bone sparing...femoral neck preservation - what about the acetabulum? Certainly not "muscle-sparing"
 - valgus implantation/upsizing head to avoid notching
 - larger cups implanted – removes more bone from the socket side than standard hip replacement
- Heterotopic bone (abnormal bone formation in the muscles) after resurfacing 28-60% (ICL 2007)



Dual Incision Total Hip

- ♣ Incision's are small
- ♣ In over 750 cases no reported dislocations in Dr. Nessler's patients
- ♣ Patients are under no restrictions
- ♣ Shorter hospital stays
- ♣ Patients return to active lifestyle

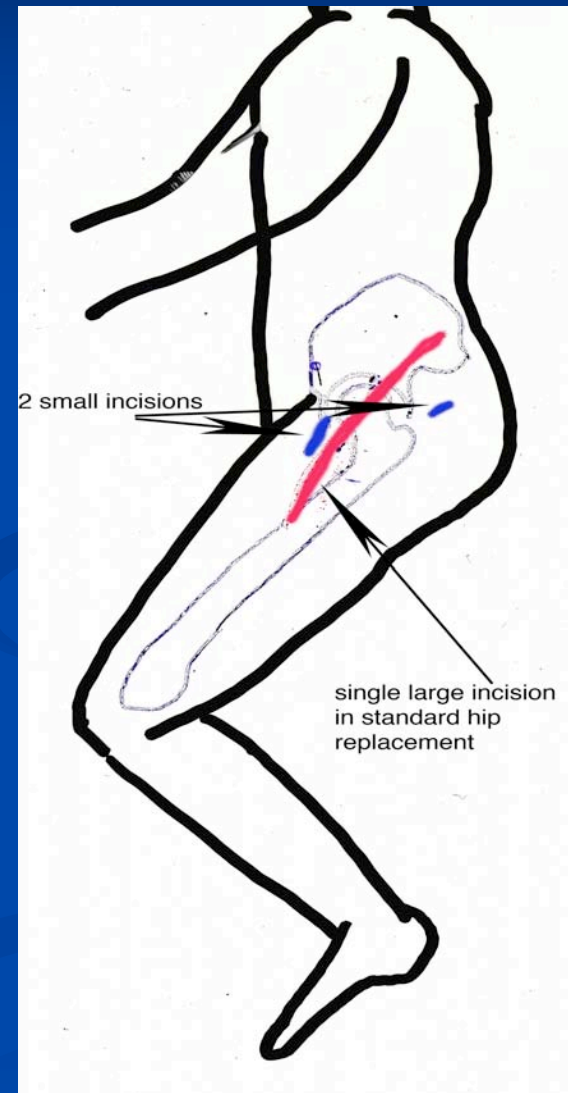


This is not your Grandma's Hip Replacement

Contraindications for Dual Incision THA

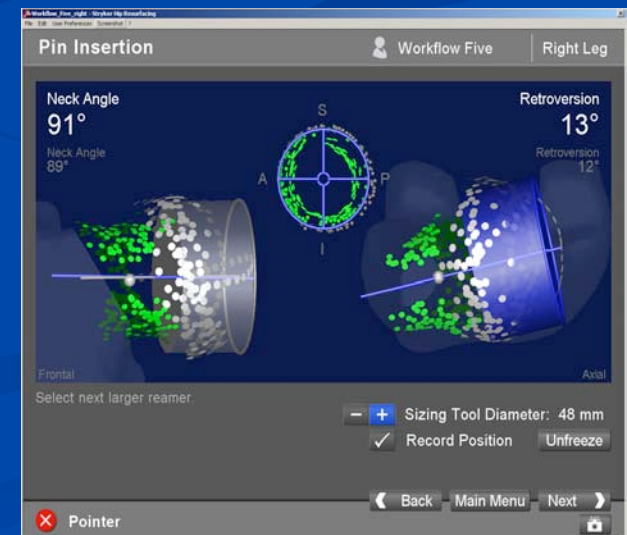
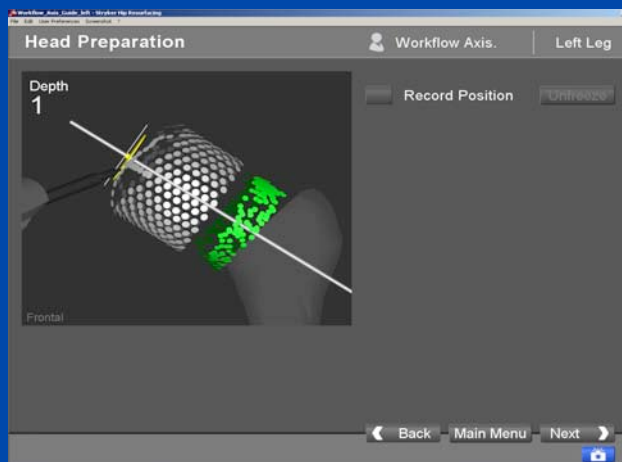
- ✓ Previous hip replacement
- ✓ Retained hardware
- ✓ Deformity requiring osteotomy
- ✓ Severe heterotopic bone
- ✓ Severe dysplasia or osteoporosis

95% of all my patients
qualify for the Dual
Incision procedure



Hip Resurfacing will I consider this option for my patients in the future?

- ✓ Possibly if...
 - ✓ Incorporating Navigation
 - ✓ The right patient
 - ✓ Improvements in component durability and design
 - ✓ Muscle sparing approaches developed for resurfacing



Hip Resurfacing – final thoughts

- ✓ My preference is Dual incision Hip replacement because:
 - ✓ It is performed as a more muscle sparing procedure
 - ✓ Has more implant choices than resurfacing
 - ✓ Implant durability is the same as or better than resurfacing
 - ✓ Active patients can return to similar activity levels with resurfacing or Dual incision replacement
 - ✓ Patients will recover quicker with muscle sparing (Dual incision) surgery