# ARC™ STEM

## Dr. Bradley K. Vaughn's

second case. Looks good to me. Brad has a good understanding of the design principals for this stem. He has done a intraoperative trial, visited and saw a hip performed in Australia and participate in a cadaver work shop. His first case looked as good as this one. From an image point of view I don't think it could be better. Of course that is no guarantee of performance but our experience with this design says it is looking good!

# ONE EASY AND ONE NOT SO EASY KEPPLER

Since Lou is in Cleveland it is of course easier for me to report directly on his cases. Lou has been getting so good with this stem that you tend to forget that there can be difficult hip surgery for reasons other than the device.

Charlie Bryant called me about a week ago to discuss one case that was extremely difficult in a large male as did Frank Schmidt a few week's ago. Since I was not at these cases the pictures and follow-up reports don't get detailed. This is a shame because it is these cases that we all learn from.

PREOPERATIVE EASY CASE

PREOPERATIVE LATERAL

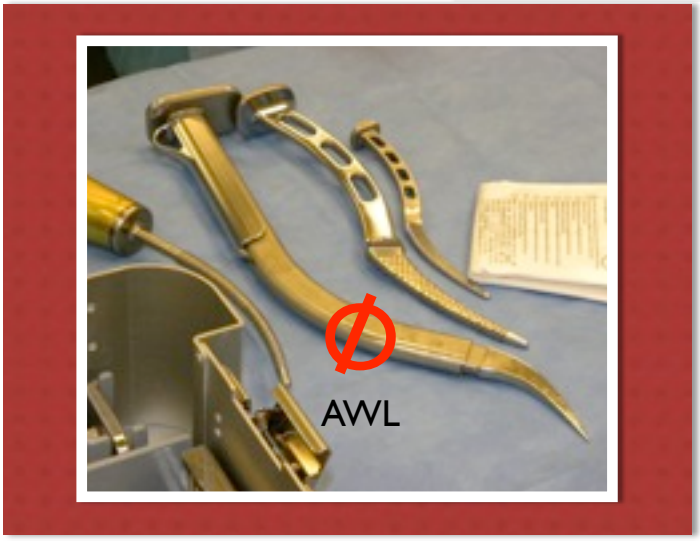
Head Resection

**Lou's cases have been getting fairly routine and not much to report that has not already been touched on. Again the simplicity of the instruments has made this something the OR team looks forward to.**

A QUICK REVIEW OF HIS CURRENT SURGICAL TECHNIQUE. TOMORROW IT MIGHT BE SLIGHTLY DIFFERENT.

## Posterior Approach

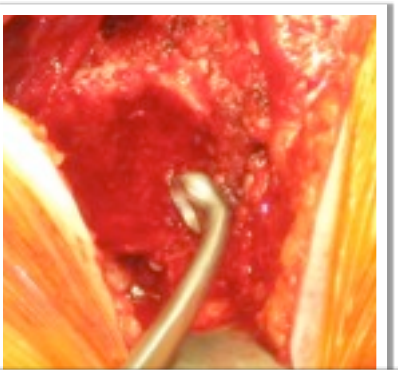
**Femoral head is dislocated then the small femoral trial is superimposed over as a marking template for level of femoral head resection 5-8 mm sub cap at about 50°.**

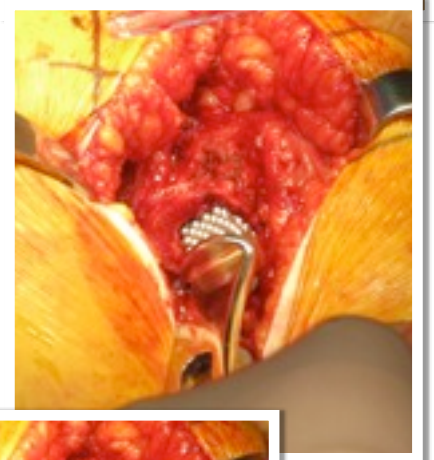



Lou has taken to doing the femoral side first. After resection of the head he moves quickly with the femoral preparation and insertion of the trial femoral stem. Curved curette, rat tail, Muller/TSI™ rasp then on to ARC™ rasps used in progression 1,2,3, or 4. No 5 have been used. He makes sure the Muller rasp is flush with resected neck

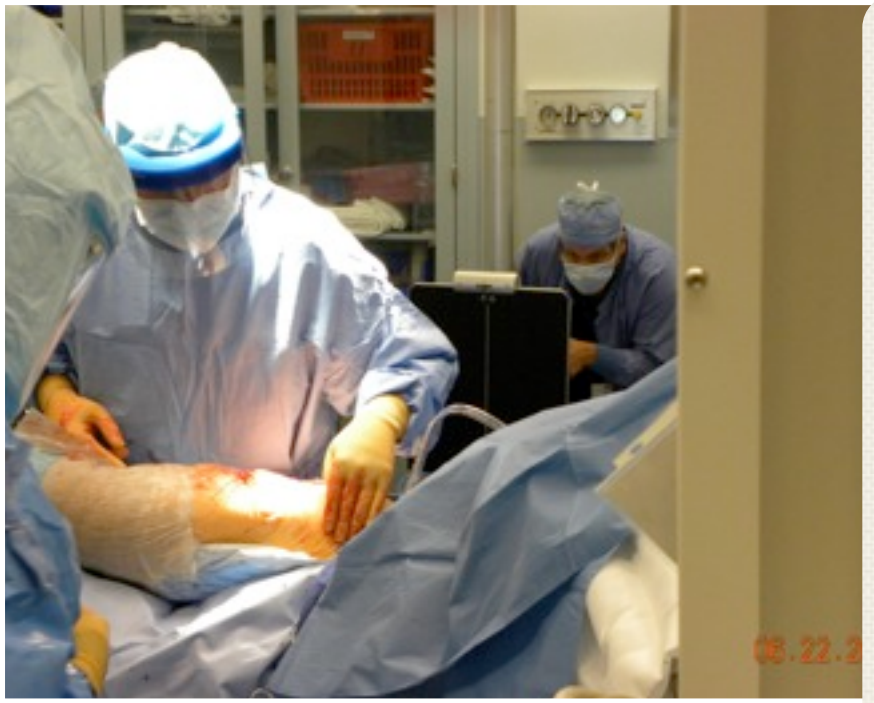
Head is removed with a cock screw and then measured against the trial femoral stem.

## FEMORAL TECHNIQUE





# X-RAY ALWAYS TAKEN




**DR. KEPPLER ALWAYS TAKES INTRAOPERATIVE X-RAYS. THIS TECHNIQUE HAS SERVED HIM WELL OVER THE PAST 25 YEARS. OVER 80% OF THE TIME HE IS MAKING ADJUSTMENTS BASED ON HIS X-RAY.**

AS WITH this CASE HE WAS SLIGHTLY LONG SO HE DROPPED THE NEUTRAL NECK AND PLACED AN 8º INTO A VARUS POSITION AND USED A -3.5 MM HEAD / NECK SIZE.

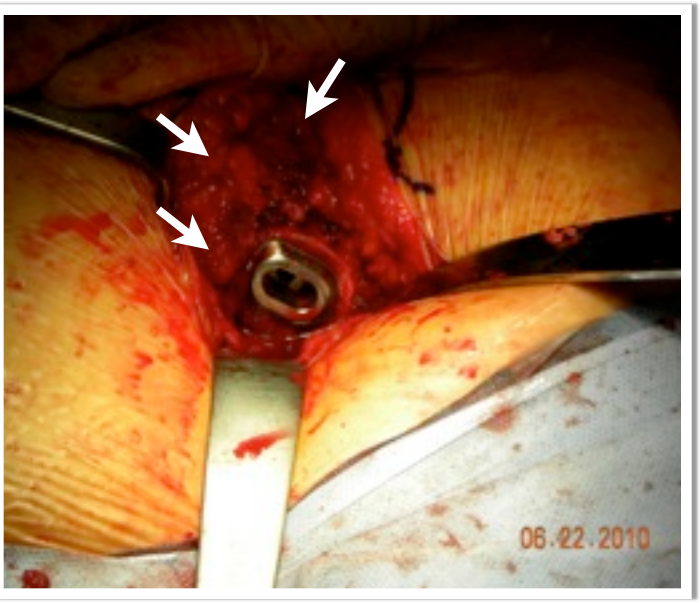
FINAL SIZE SELECTION:

SIZE 1 STEM, 32 MM CERAMIC -3.5 MM HEAD USED WITH A 8º VARUS MODULAR NECK 56 MM POROUS SHELL WITH SCREW FIXATION.

THIS WAS A STRAIGHT FORWARD CASE AND TOOK NO MORE THAN 45 MINUTES.

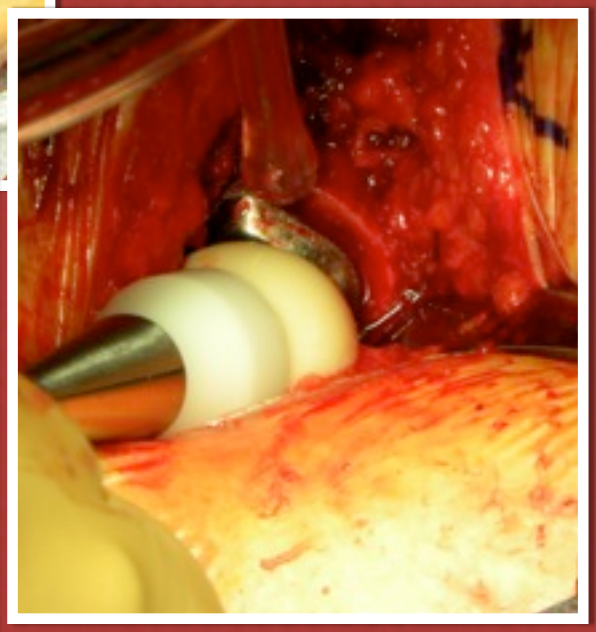
# ADDITIONAL PHOTOS


You can see here that since only a size one stem was used the rest of the tray of instruments were not needed so its makes for a quick case.



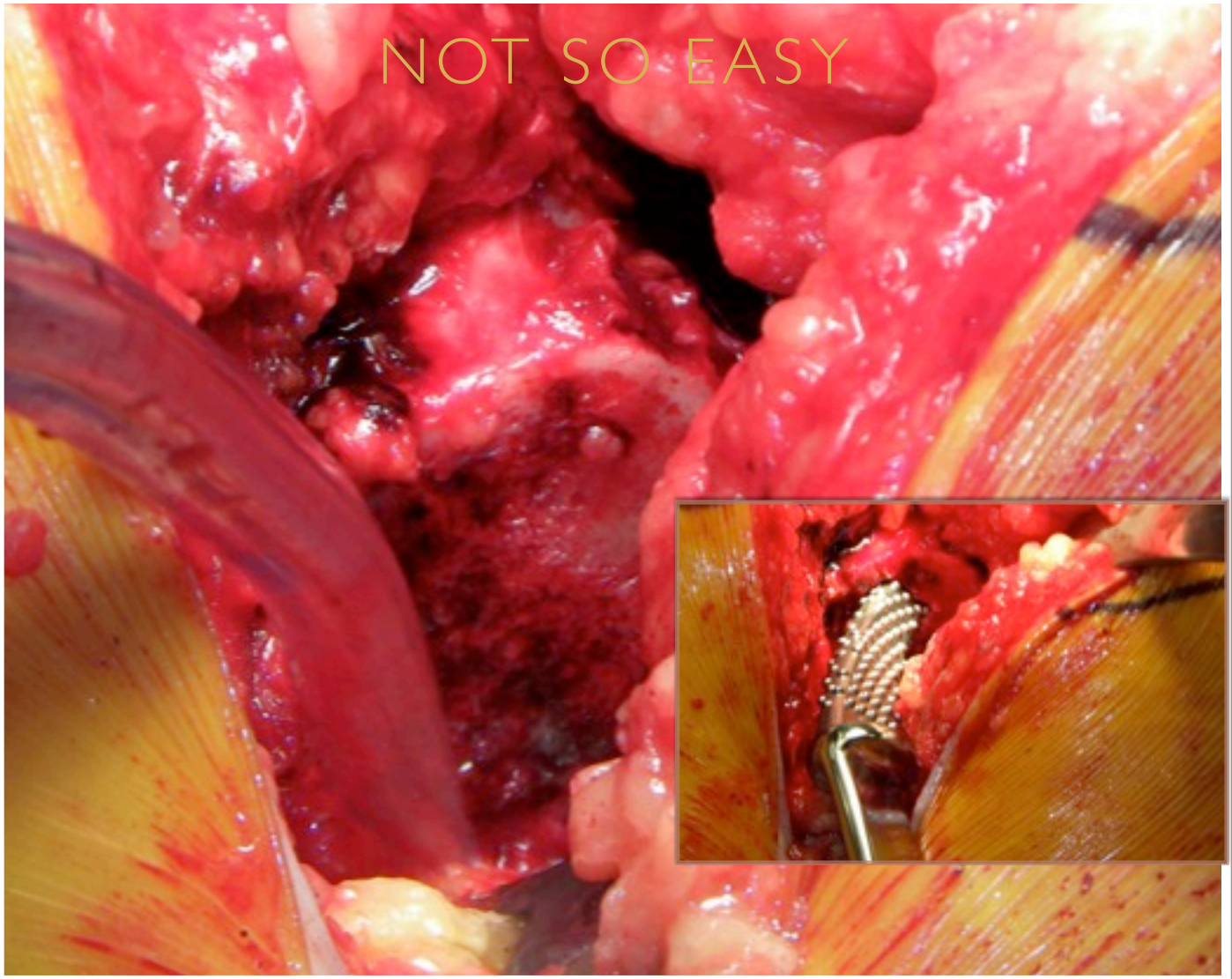

Notice how none of the lateral structures were touched. Less tissue trauma!

# FINAL IMPLANTS

OUR NEXT CASE REQUIRED A LITTLE MORE WORK. LARGE MALE WITH SOME SIGNIFICANT MUSCLE MASS.

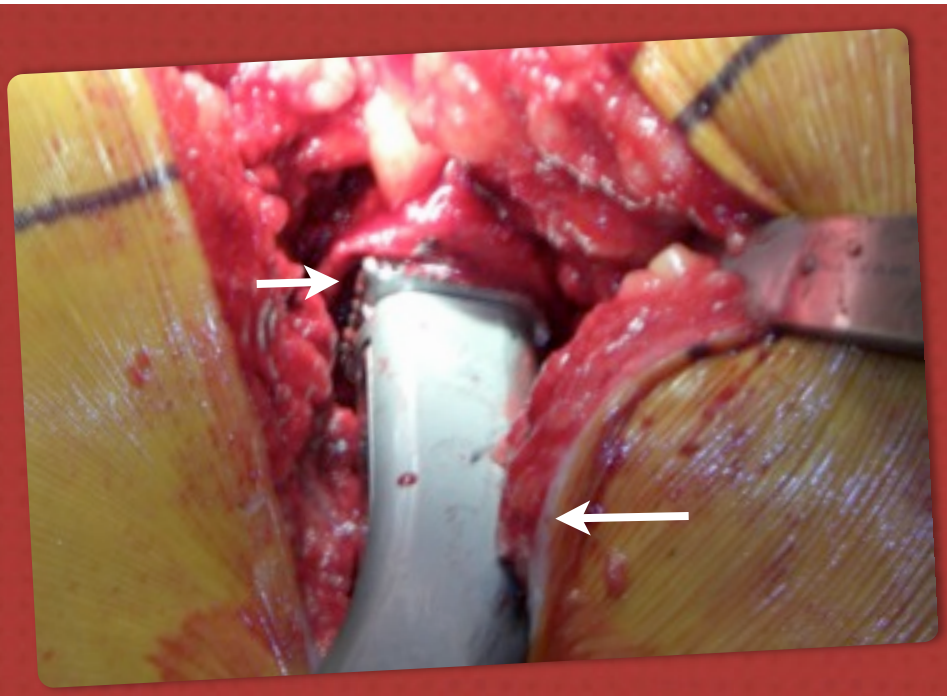
# NOT SO EASY



## SIGNIFICANT ANTERIOR OSTEOPHYTES

1. CAN BE DIFFICULT TO RECOGNIZE WITH POSTERIOR APPROACH
2. CAN BE DIFFICULT TO GET AT AND REMOVE
3. CAN INCREASE MECHANICAL IMPINGEMENT ISSUES
4. NEED TO SPEND TIME TO REMOVE

Femoral exposure was difficult with anterior osteophytes.



## CURVATURE OF RASP HANDLE

In large patients such as this man the curve of the handle in a posterior approach can be affected by the superior medial soft tissue forcing lateral pressure on the direction of your rasp. This is not a difficult problem but one that should be recognized

It can create a small opening gap between the bone and final implant at the proximal lateral implant interface.

This case was about 1:40 minutes fighting exposure not necessary due to neck retention but to patient profile.