

Hip Aspiration: Should All Revision Hip Surgeons Do It Themselves?

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INTRODUCTION:

Revision Total Hip Replacement (THR) is performed for a variety of reasons, infection being one of them. Hip aspiration prior to revision THR is crucial to aid with the management in infected THR cases. We report two cases who had a failed aspiration under the interventional radiology team but who were successfully aspirated under the Orthopaedic team which aided in the surgical management of the revision THR for infection. We also wish to present our hip aspiration technique.

REPORT:

A 75-year-old lady who had an uncemented bipolar hip hemiarthroplasty in 2018 for a neck of femur fracture (NOFF) presented with continuous progressive pain in the left hip for 2 years. Plain radiographs and CT hip showed acetabular protrusion. Ultrasound guided aspiration was requested but it was not performed by the radiology team as her CT scan did not show any fluid collection. The Orthopaedic team proceeded with hip aspiration and aspirated 3mls of turbid pus-like fluid from her left hip. This was done in a sterile field with the patient supine in theatre under local anaesthesia with image intensifier guidance. Her cultures grew *Enterococcus faecalis*, and subsequently a well-fixed Exeter Custom-Made Articulating Spacer (CUMARS) construct was performed utilizing appropriate targeted sensitive antibiotics guided by organism sensitivities.

A 76-year-old lady who had an uncemented bipolar hip hemiarthroplasty for a NOFF presented with hip pain. CT guided aspiration by the radiologist resulted in a 'dry tap'. 1.5mls of turbid fluid was aspirated by the Orthopaedic team under image intensifier in theatre and it grew *Pseudomonas aeruginosa*. Similarly, a well-fixed Exeter CUMARS construct was performed on her using appropriate targeted sensitive heat stable antibiotics in bone cement.



Figure 1: Showing the technique for hip aspiration by the Orthopaedic team

CONCLUSION:

Contrary to the belief that hip aspirations 'usually' result in a 'dry tap', hip aspiration yields an aspirate in the majority of cases if the correct technique is used. Organism sensitivity has to be isolated so the appropriate antibiotics can be added to bone cement for the CUMARS construct.

All revision hip surgeons performing revision THR for infected cases should aspirate the hips themselves in a sterile environment under image intensifier. This would also enable them to look at the consistency and colour of the aspirate themselves which may aid in the decision making.

REFERENCES:

Tsung JD et.al. Management of Periprosthetic Joint Infection after THA using CUMARS: The Exeter Experience. *Arthroplasty* 29 (2014);1813-15