Investigation for Potentially infected Prosthetic Joints

**JOINT ASPIRATION +/- WASHOUT IN THEATRES**
**UNLESS PATIENT IS SEPTIC, DO NOT START ANTIBIOTICS BEFORE ASPIRATE/ SAMPLES HAVE BEEN TAKEN**

**Sterile technique**
Collect 10-15mls joint fluid and put into sterile container and blood culture bottles (1 set)

**Bloods:**
- CRP, FBC, ESR
- Blood Cultures

**Microbiology**
Microscopy, cell count, crystals + culture
Positive gram stain, or Cell Count \(>1700 \times 10^6/\text{ml}\): highly suggestive of infected prosthesis:
Requires active treatment – discuss with consultant and consider washout +/- revision surgery

**REVISION SURGERY (1ST AND 2ND STAGE)**

**Sterile technique**
Use different set of instruments for each sample send:
- 1 joint fluid +/- 1 set of blood culture bottles with joint fluid
- 5 tissue samples *Not bigger than 1 cm³*

*Send to Micro straight away. Do not leave in fridge*
Start vancomycin 1g stat and meropenem 1g tds after sample collection (If organism known – treat as advised by Micro)

**Culture results:**
Positive at least 2 out of 5 samples – This is **SIGNIFICANT**: choose the most appropriate antibiotics on discussion with microbiology
Positive in 1 out of 5, or with mixtures – discuss with microbiology - may be contaminants
Negative – consider alternative diagnoses. If infected prosthesis still considered likely – discuss with micro