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



FIRST:
Sterile container
1-2 mls

SECOND:
Blood culture set (aerobic and anaerobic): 5 - 8mls in each



Microbiology
Microscopy, cell count, crystals + culture
Positive gram stain, or Cell Count >1700 x10^6/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 cm^3*



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