Gram Positive Bacilli (GPB)

Potential GPB organisms later confirmed by culture:

“Diphtheroid” bacilli or Coryneforms, Proprionibacteria, *Bacillus* species, *Listeria monocytogenes* /spp Anaerobic GPB including *Clostridium perfringens* , and other Clostridia species

Risk assessment

The key is to review the patient carefully for signs and symptoms of sepsis / bacteraemia.

Carry out a NEWS score and follow the Sepsis Six protocol if clinically indicated. Bear in mind that the gram stain result may reflect a causative organism of life threatening sepsis (e,g Listeria / Clostridia species) or more frequently, a skin contaminant (e.g. Diphtheroid bacilli or Bacillus species), therefore careful clinical risk assessment is paramount.

It is important not to dismiss potential skin contaminants such as Diphtheroid bacilli / Bacillus species if endocarditis / intravascular catheter or prosthetic device infection suspected, or if the more uncommon conditions such as Diphtheria / Bacillus anthracis / Bacillus cereus infection suspected on clinical grounds.

Empiric Antibiotic Cover

This should be guided by the gram stain appearance and likely significance / pathogen based on the clinical risk assessment. If Listeria bacteraemia / sepsis suspected – Amoxicillin +/- Gentamicin (in penicillin allergy discuss with microbiology team). If Clostridial bacteraemia / sepsis suspected (e.g in setting of faecal peritonitis / severe wound infection etc) – a broad – spectrum penicillin such as co-amoxiclav / piperacillin – tazobactam (in penicillin allergy discuss with microbiology team). If systemic sepsis is suspected, and source unclear - glycopeptides cover most gram positive organisms and a reasonable option to cover the patient pending identification and sensitivity and follow up with culture and review of antimicrobial therapy.

However if the patient is clinically well following a thorough clinical review and contamination is suspected, – a watch-and-observe approach is reasonable pending ID and sensitivity on culture. Bear in mind that the patient may already be on appropriate antibiotic regimen for their condition. Ensure there is a trigger for a repeat review and initiation of empiric antimicrobial therapy if the patient develops new signs/symptoms.