MICROBIOLOGY CULTURE ANALYSIS IN PRIMARY V RECURREN T DIABETIC FOOT INFECTIONS

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CONFLICT OF INTEREST

• NO CONFLICT TO DISCLOSE

Microbiology Culture Analysis in Primary v Recurrent Diabetic Foot Infections

Mr Nicholas Howard

My disclosure is in the Final AOFAS Mobile App.

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I have no potential conflicts with this presentation.
AIM

• To establish whether deep tissue biopsy cultures differ between diabetic primary foot infections and chronic/recurring infections.

• To assess antibiotic sensitivities in diabetic foot infections to see if a pragmatic pre-biopsy antibiotic regime could be effective.
GENERAL TRENDS OF INFECTIONS

SKIN COMMENSALS
- eg Staph Aureus, Streptococcus

ADDITIONAL COLIFORMS
- eg E.Coli, Anaerobes

ADDITIONAL ENVIRONMENTALS
- Eg Pseudomonas, Enterococcus Faecalis
Retrospective study of all diabetic foot infections in 1 UK hospital over 9 month period.

All included patients had intractable ulcer of the lower limb.

All patients had deep tissue samples taken and grew positive microbiology cultures.

Patients were then grouped into primary presentation of diabetic foot infection or recurrent/chronic group.
PRIMARY V RECURRENT DIABETIC FOOT INFECTIONS – RESULTS

41 DFI

8 Primary

- 38% Polymicrobial
- 62% Single organism

33 Recurrent

- 58% Polymicrobial
- 42% Single Organism
PRIMARY V CHRONIC PATHOGENS
DEEP TISSUE SAMPLES

Primary Infections
- Staph Aureus
- Gram Negative
- Streptococcus
- Others

Chronic Infections
- Staph
- Strep
- Anaerobes
- Gram Negative
- Enterococcus
• Microbiology cultures differ significantly between first time presentation and recurrence.

• Increase in polymicrobial infections and complexity of treatment needed in chronic/recurrent cases.

• Higher number of anaerobes and gram negative organisms seen in chronic infections.

• Very difficult to guide effective antibiotic therapy in both primary and chronic infections without deep tissue biopsy.


