Diagnostic techniques

Cytology is most useful for identifying bacteria and yeast (Malassezia) and detecting inflammatory cells. It may also help to detect superficial parasites. Multiple samples should be taken from affected areas via tape strips, impression smears and/or swabs. Various commercial staining kits are available.

Impression smear

Technique

1. Clip hair and remove superficial crusts.
2. Gently open the surface of pustules and papules.
3. Press microscope slide against the lesions and allow to dry.
4. Stain using a commercial staining kit
5. Examine slide under high power (x400) and oil immersion

Interpretation

Yeast (Malassezia)

Malassezia have a distinctive ‘footprint’ or ‘peanut’ shape. More than two Malassezia per high power (x400) field is suggestive of Malassezia dermatitis.

Bacteria

- Cocci are a typical cause of pyoderma.
- Neutrophils containing intracellular bacteria are diagnostic of bacterial pyoderma.
- Rods suggest an atypical infection. Consider carrying out culture and sensitivity tests.