



DIAGNOSTIC TECHNIQUES

# **DEEP SKIN SCRAPING**

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## WHEN DO I DO IT?

• In cases of suspected demodicosis (non-inflammatory alopecia, comedones, pustules, crusts, inflammatory alopecia)

### WHAT CAN I FIND?

Demodex mites, including juvenile forms and eggs → more than one mite is diagnostic

### WHAT DO I NEED?

• Slides, cover slips, scalpel blade, mineral oil, microscope.

SKIN SCRAPING EQUIPMENT VIDEO: ExcellenceInDermatology.com → Education Library → Videos

#### **TECHNIQUE IMAGES: DEEP SKIN SCRAPING**



Dog with demodicosis: inflammatory alopecia, hyperpigmentation (Courtesy: S. Bettenay)



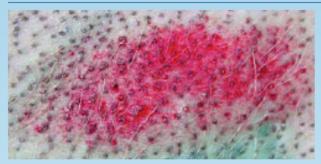
Focal alopecia due to demodicosis, puppy (Courtesy: F. Albanese, F. Leone)



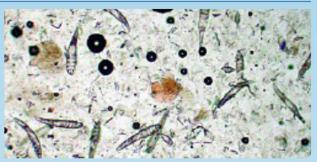
Squeeze skin prior to scraping (Courtesy: S. Bettenay)



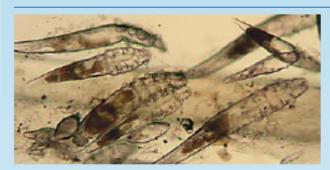
Scrape until light capillary oozing is observed (Courtesy: S. Bettenay)



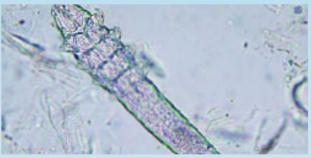
Excoriation after deep skin scraping (Courtesy: F. Albanese, F. Leone)



*Demodex* mites, adults and juvenile forms (Courtesy: F. Albanese, F. Leone)



*Demodex* mites, larvae and eggs (Courtesy: T. Nuttall)



Demodex canis (Courtesy: S. Bettenay)

### HOW DO I DO IT?

- If necessary, clip 1cm<sup>2</sup> of the area you want to scrape to remove hairs
- · Squeeze the skin prior to scraping to push the mites out from the depths of the hair follicles
- Scrape the skin in the direction of hair growth with a blade or spatula covered with mineral oil until capillary bleeding is observed
- · Put the material on the slide
- Place a cover slip onto the sample and evaluate microscopically, using the 4x or 10x objective with the microscope condenser moved down.

**SKIN SCRAPING PROCEDURE VIDEO:** ExcellenceInDermatology.com  $\rightarrow$  Education Library  $\rightarrow$  Videos

### **TIP**

- Feet and face are hard to scrape → Trichogram may give equivalent results if 1cm² of hairs is sampled.
- Some breeds (e.g. Shar Pei) are hard to scrape and a skin biopsy may be needed to make a diagnosis.