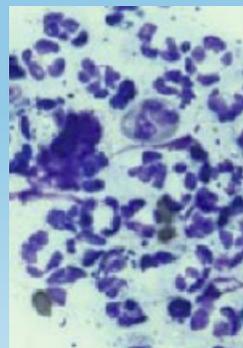
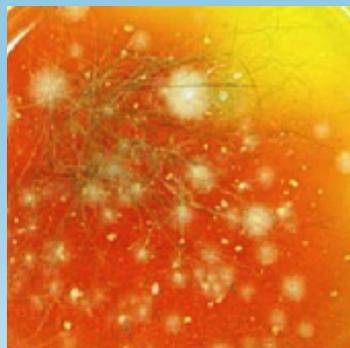
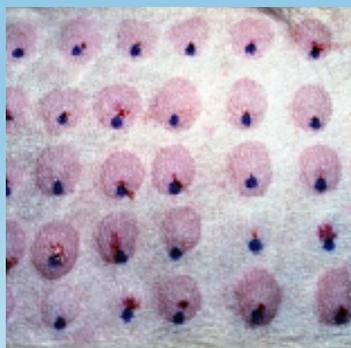
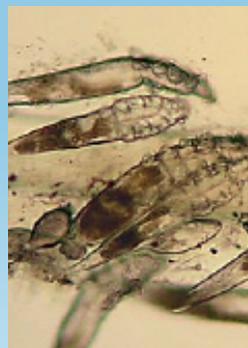


EXCELLENCE IN DERMATOLOGY.COM

DIAGNOSTIC TECHNIQUES





DIAGNOSTIC TECHNIQUES

CONTENTS

BACTERIAL CULTURE & SUSCEPTIBILITY : 1.1

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OVERVIEW

Skin disorders and skin inflammations are among the most common reasons for pet visits to the veterinarian, and diagnosing dermatology conditions is a routine challenge. The need for a proper diagnosis is essential for determining the most appropriate course of therapy, and achieving the best outcome for the pet.

There are only a few dermatologic tests that can be performed to determine the cause of the skin disease, and not all require a specialist laboratory. Some of these tests can easily and quickly be performed in practice. They do not require special equipment and can in most cases deliver a definite result while the patient is still in the practice.



DIAGNOSTIC TECHNIQUES

BACTERIAL CULTURE & SUSCEPTIBILITY

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WHEN DO I DO IT? : 1.1

WHAT CAN I FIND? : 1.1

TECHNIQUE IMAGES : 1.2

WHAT DO I NEED? : 1.2

HOW DO I DO IT? : 1.2

TIP : 1.3

WHEN DO I DO IT?

- If an animal has failed to respond to an empiric course of therapy at the appropriate dose, administered appropriately, for a sufficient period of time
- If there are draining tracts
- If, after a course of therapy, cutaneous cytology continues to demonstrate bacteria
- If rod-shaped bacteria or a mixed population of bacteria are identified with cutaneous cytology

WHAT CAN I FIND?

- Confirm the presence of bacteria as a part of the pathogenesis of the disease condition (and rule out a sterile pyoderma)
- Obtain information on the appropriate antimicrobial to be used
- Identify any bacteria that may have zoonotic potential

WHAT DO I NEED?

- Bacterial culturette swab for collection of material to be sent to a laboratory for aerobic culture and susceptibility testing

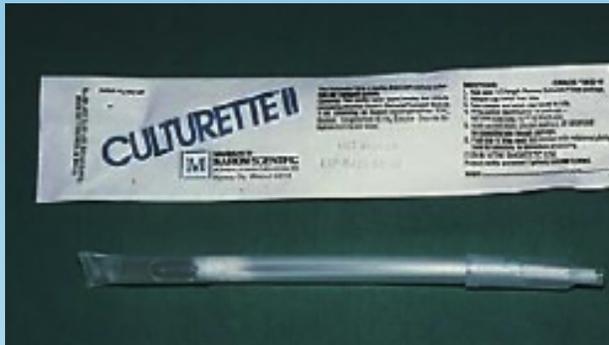
EQUIPMENT VIDEO: [ExcellenceInDermatology.com](#) → [Education Library](#) → [Videos](#)

HOW DO I DO IT?

- Take culture material from an intact pustule, the periphery of an epidermal collarettes, inside the depth of a draining tract or the dermal side of a skin punch biopsy
- Rupture an intact pustule with a sterile 25 ga needle and collect the purulent exudate
- Samples are placed into the transport media and sent to the laboratory

PROCEDURE VIDEO: [ExcellenceInDermatology.com](#) → [Education Library](#) → [Videos](#)

TECHNIQUE IMAGES : BACTERIAL CULTURE & SUSCEPTIBILITY



Bacterial culturette tube



ID of an intact pustule to be sampled



Rupture of the pustule with a sterile needle



Sampling of the purulent material from the ruptured pustule

TIP

- Don't clean or prep the surface of a pustule prior to sampling as this may rupture the pustule
- Interpret the culture results in light of the clinical condition
- If more than 1 bacterial organism has been isolated, choose an antibiotic that has efficacy against the more important skin pathogen, *Staphylococcus pseudintermedius*



DIAGNOSTIC TECHNIQUES

CUTANEOUS CYTOLOGY

CONTENTS

WHEN DO I DO IT? : 2.1

WHAT CAN I FIND? : 2.1

WHAT DO I NEED? : 2.2

HOW DO I DO IT? : 2.2

TECHNIQUE IMAGES : 2.3

TIP : 2.4

WHEN DO I DO IT?

- When bacterial or yeast infection is suspected (inflammatory alopecia, seborrhea, scales, papules, pustules, crusts, erosions, ulcers)
- In patients with nodules/tumors → do cytology on every nodule/tumor
- In patients with suspected pemphigoid diseases (erosions, pustules, crusts)
- In every patient with otitis externa

WHAT CAN I FIND?

- Cocci (most likely *Staphylococcus sp.*)
- Rods → culture and susceptibility advisable
- Inflammatory cells with intracellular bacteria → clinically relevant infection that may require systemic antibiotic treatment
- Eosinophils → can point to ectoparasites or allergies

- Macrophages → seen in chronic, sterile and infectious processes
- *Malassezia spp.* → one or more *Malassezia sp.* per oil immersion field (x 1000 magnification) may be clinically relevant (normal numbers vary can vary with the climate.) In cases of *Malassezia* hypersensitivity a much lower number of *Malassezia* (e.g. one in every two or three HPFs) can cause clinical disease. Topical or systemic treatment should be considered.
- Neoplastic cells

WHAT DO I NEED?

- Slides, Diff-Quick® or similar stain, mineral oil, adhesive tape, microscope, needle and syringe

EQUIPMENT VIDEO: [ExcellenceInDermatology.com](#) → [Education Library](#) → [Videos](#)

HOW DO I DO IT?

IMPRESSION SMEAR

- Rub or impress a slide on moist, exuding or greasy surface of infected skin.
- Role a cotton bud on the skin surface or insert it in the ears and role cotton bud on the slide.
- Insert needle (25 - 27 ga.) into the pustule holding the needle parallel to the skin so that only the pustule is punctured, no deeper cells or blood are required, top is lifted off and slide impressed onto the ruptured pustule.
- Use the sticky surface of the adhesive tape to collect cells and surface organisms from dry and / or scaly skin and then place this (sticky side down) onto a glass slide with a drop of the blue Diff-Quick® stain. The tape acts as its own coverslip.
- Apply a piece of double-sided adhesive tape to a slide and collect material with the sticky slide. Stain this in the blue Diff-Quick® stain, dry and examine under oil immersion.

ASPIRATION SMEAR

- Insert needle into nodules or abscesses and re-insert a number of times without leaving the skin. Withdraw the needle. A syringe with the plunger pulled back is attached to the needle and contents is blown onto a slide and air dried.
- Stain the air dried slides (e.g. Diff-Quick®)
- Put the slides under a microscope, condenser up.

PROCEDURE VIDEO: [ExcellenceInDermatology.com](#) → [Education Library](#) → [Videos](#)

TECHNIQUE IMAGES : CUTANEOUS CYTOLOGY



Superficial pyoderma (Courtesy: S. Bettenay)



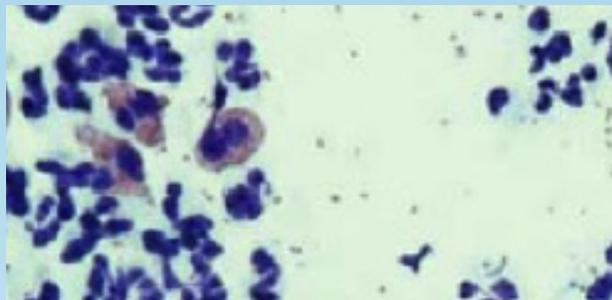
Use adhesive tape technique on dry skin or in ainterdigital area (Courtesy: S. Bettenay)



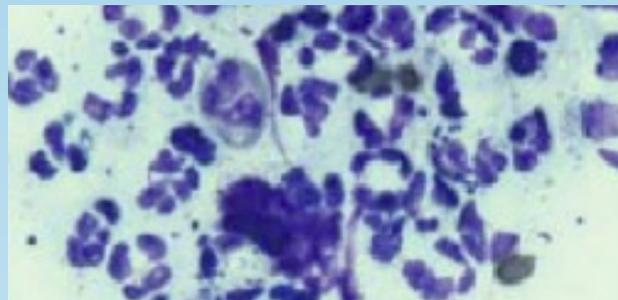
Impression smear: slide pressed on skin (Courtesy: S. Bettenay)



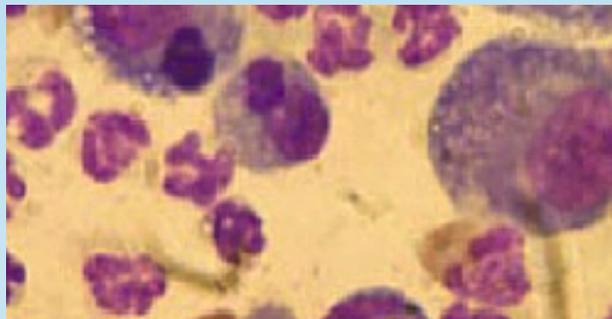
Aspiration smear: insert needle into nodule (Courtesy: S. Bettenay)



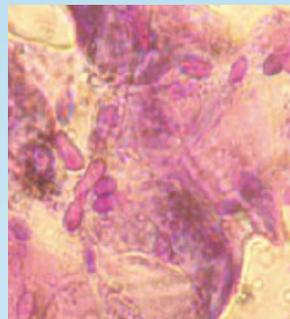
Eosinophils, neutrophils and bacteria (Courtesy: S. Bettenay)



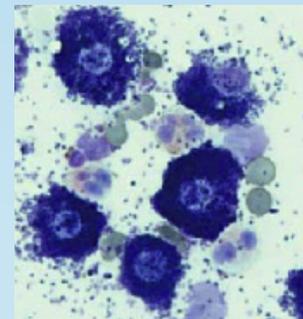
Superficial pyoderma: neutrophils with intracellular cocci (Courtesy: S. Bettenay)



Pyogranulomatous inflammation: many neutrophils, macrophages, few bacteria



Malassezia and bacteria (Courtesy: S. Peters)



Grade 1 mast cell tumor with eosinophils (Courtesy: S. Bettenay)

TIP

- In case of dry skin or in the interdigital area:
 - Insert needle into nodules or abscesses and re-insert a number of times without leaving the skin. Withdraw the needle. A syringe with the plunger pulled back is attached to the needle and contents is blown onto a slide and air dried.
 - Stain the air dried slides (e.g. Diff-Quick®)
 - Put the slides under a microscope, condenser up.



DIAGNOSTIC TECHNIQUES

DEEP SKIN SCRAPING

CONTENTS

WHEN DO I DO IT? : 3.1

WHAT CAN I FIND? : 3.1

WHAT DO I NEED? : 3.1

TECHNIQUE IMAGES : 3.2

HOW DO I DO IT? : 3.3

TIP : 3.3

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)



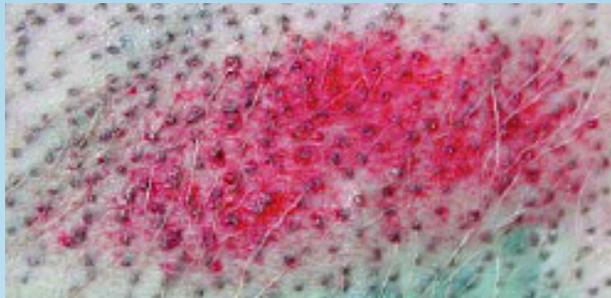
Focal alopecia due to demodicosis, puppy (Courtesy: F. Albanese, F. Leone)



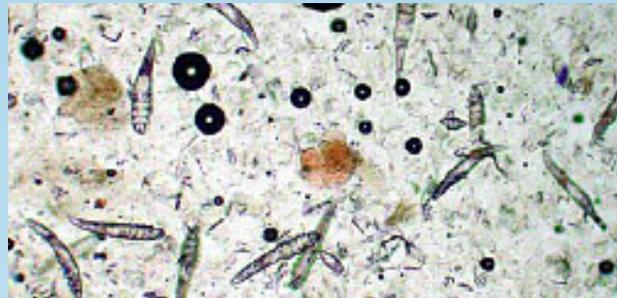
Squeeze skin prior to scraping (Courtesy: S. Bettenay)



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 1cm² 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](https://www.excellencein dermatology.com) → [Education Library](#) → [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.



DIAGNOSTIC TECHNIQUES

FUNGAL CULTURE & IDENTIFICATION

CONTENTS

WHEN DO I DO IT? : 4.1

WHAT CAN I FIND? : 4.1

WHAT DO I NEED? : 4.2

HOW DO I DO IT? : 4.2

TIP : 4.2

TECHNIQUE IMAGES : 4.3

WHEN DO I DO IT?

- In every patient with suspected fungal infection

WHAT CAN I FIND?

MICROSPORUM CANIS

- White, woolly colonies with a yellowish reverse pigment
- Thick walled, spindle-shaped macroconidia with knobs at the ends and typically more than six internal compartments

MICROSPORUM GYPSEUM

- Granular, beige cultures with yellowish reverse pigment
- Abundant thin-walled macroconidia with six or fewer internal compartments

TRICHOPHYTON MENTAGROPHYTES

- White powdery-looking colonies with
- Very few, cigar-shaped macroconidia and large numbers of small round microconidia

WHAT DO I NEED?

- Dermatophyte test medium (DTM), clear sticky tape, slides, microscope, methylene blue or Diff-Quick® blue

FUNGAL CULTURE EQUIPMENT VIDEO: [ExcellenceInDermatology.com](https://www.excellencein dermatology.com) → [Education Library](#) → [Videos](#)

HOW DO I DO IT?

- Use a scalpel with water to scrape and hemostats to pluck; take hairs and scale from the edge of a lesion (preferably the ones fluorescing under the Wood's light)
- Impress hairs and scale gently on DTM; do not screw the lid tight
- Incubate the agar at 20-25°C (a warm space with moisture is better)
- Check the agar daily over a 3 week period
- Color change (pH change) that occurs when the colony is still small and then spreads as the colony grows is indicative of dermatophytes
- When the colony is 10-14 days old, impress clear sticky tape (sticky side down) gently on the suspicious colonies and lay it down onto a drop of methylene blue or other stain on a slide.
- Evaluate the sample under a microscope with the condenser up. The sticky tape acts as its own cover slip.

FUNGAL CULTURE PROCEDURE VIDEOS: [ExcellenceInDermatology.com](https://www.excellencein dermatology.com) → [Education Library](#) → [Videos](#)

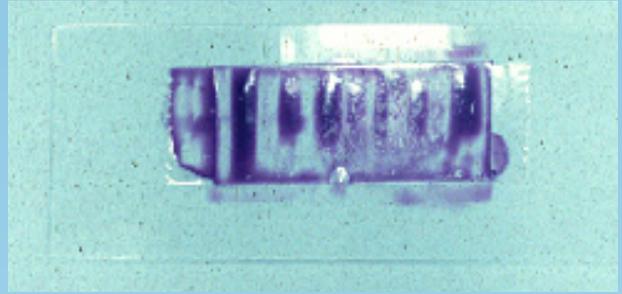
TIP

- If the patient has no clearly circumscribed lesion or an asymptomatic carrier is suspected use the McKenzie toothbrush technique.
- Brush the hair with a new toothbrush for about 5 minutes
- Gently place the hairs and scale, using a sterile needle, onto the agar or cut the bristles with sterile scissors
- Put all the material (bristles, hairs, scale) onto the agar
- Agar color changes can also occur with saprophyte colonies, particularly as they age. Daily examination of the culture is imperative to notice a color change that accompanies a growing culture.

TECHNIQUE IMAGES : FUNGAL CULTURE & IDENTIFICATION



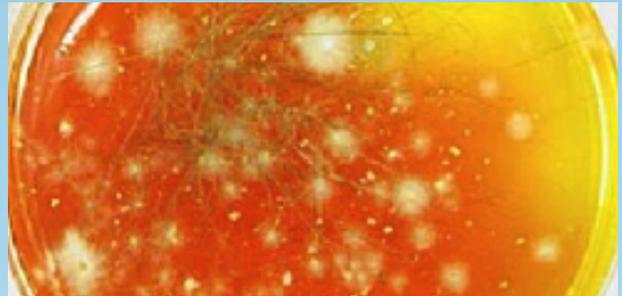
Dog with localized dermatophytosis (kerion)
(Courtesy: S. Peters)



Clear acetate tape over a drop of stain after collecting fungal spores



DTM false positive: saprophyte colonies
(Courtesy: S. Peters)



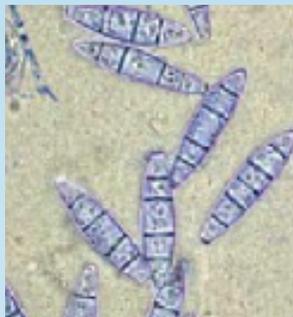
DTM positive: *Microsporum canis*
(Courtesy: T. Nuttall)



DTM positive: *Microsporum canis*
(Courtesy: T. Nuttall)



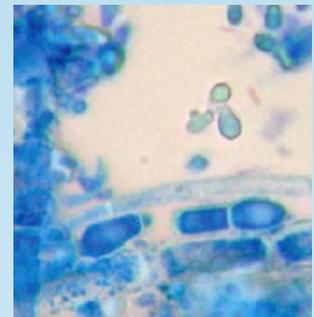
DTM positive: *Microsporum gypseum*
(Courtesy: F. Albanese)



Microsporum gypseum
macroconidia
(Courtesy: F. Albanese)



DTM positive: *Trichophyton mentagrophytes*
(Courtesy: F. Albanese)



Trichophyton mentagrophytes
macroconidia and microconidia
(Courtesy: T. Nuttall)



DIAGNOSTIC TECHNIQUES

INTRADERMAL TESTING

CONTENTS

WHEN DO I DO IT? : 5.1

WHAT CAN I FIND? : 5.1

TECHNIQUE IMAGES : 5.2

WHAT DO I NEED? : 5.2

HOW DO I DO IT? : 5.2

TIP : 5.3

WHEN DO I DO IT?

- After a clinical diagnosis of atopic dermatitis has been made and you want to identify the relevant allergens to include in an allergy vaccine
- As an adjunct test to confirm flea allergy in a dog

WHAT CAN I FIND?

- Identify the most important environmental allergens (house dust mites; animal danders; pollens from trees, weeds and grasses; molds)

WHAT DO I NEED?

- An assortment of relevant allergens, usually about 50, diluted to proper skin test concentration
- Tuberculin syringes and 25 ga needles, clippers, permanent marker pen, calipers or ruler to measure reaction sites

EQUIPMENT VIDEO: ExcellenceInDermatology.com → [Education Library](#) → [Videos](#)

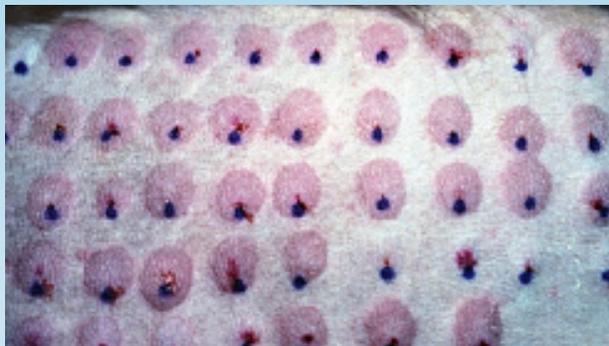
TECHNIQUE IMAGES : INTRADERMAL TESTING



Multiple syringes filled with allergens for intradermal testing



Injecting allergen into the dermis



Multiple positive reactions in a dog with atopic dermatitis



Positive intradermal test to flea allergen ((-) and (+) controls on the top row)

HOW DO I DO IT?

- If necessary sedate the dog with medetomidine or propofol
- Clip the hair from the lateral thorax
- Mark the sites with a permanent marker pen

- Inject approximately 0.05 ml of the negative and positive control controls as well as each allergen
- Reaction sites are examined 10 to 20 minutes later and evaluated for size, erythema and turgor and graded from 0 to 4+.

PROCEDURE VIDEO: [ExcellenceInDermatology.com](#) → [Education Library](#) → [Videos](#)

TIP

- This test will not diagnose the disease but should only be used for those patients where immunotherapy is going to be used to treat atopic dermatitis
- Most dogs with flea allergy will show an immediate reaction but some will only have a delayed (24-48 hour) reaction



DIAGNOSTIC TECHNIQUES

SKIN BIOPSY

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WHEN DO I DO IT? : 6.1

WHAT CAN I FIND? : 6.1

WHAT DO I NEED? : 6.2

HOW DO I DO IT? : 6.2

TIP : 6.2

TECHNIQUE IMAGES : 6.3

WHEN DO I DO IT?

- Sample any lesion(s) that look unusual or behaves in an unexpected manner
- Consider a skin biopsy if the animal has failed to respond to an empirical course of therapy
- Consider a skin biopsy if the animal is systemically ill
- Biopsy any nodule or non-healing ulcer as these may be neoplastic
- If the potential therapy is potentially dangerous or expensive a diagnosis should be confirmed with histopathology
- To rule out other diagnoses

WHAT CAN I FIND?

- Confirm a clinical diagnosis
- Rule out a suspected clinical diagnosis

WHAT DO I NEED?

- Skin punch biopsy (4 mm or 6 mm), thumb forceps, iris scissors, scalpel blade if performing a wedge biopsy, needle holder, suture material, 10% formalin

SKIN BIOPSY EQUIPMENT VIDEO: [ExcellenceInDermatology.com](https://www.excellenceindermatology.com) → [Education Library](#) → [Videos](#)

HOW DO I DO IT?

- Local anesthesia with sedation and pain management if needed
- Skin is *not* prepped
- If necessary, gently clip the overlying hair
- 1-2% lidocaine or bupivacaine
- Sodium bicarbonate to reduce stinging (1:9)
- 0.1ml bicarbonate to 0.9ml lidocaine
- Epinephrine 1:1,000 into hub of the syringe
- 0.75-1cc per site, use 25 gauge needle
- Recommended safe dose of 2% lidocaine
- Dogs: 1-1.5 ml/ 4kg
- Cats: 0.5-0.75 ml/ 4kg (Dilute 50:50 with saline if larger volume needed)
- Wait up to 10 minutes for the injection to take effect

SKIN BIOPSY PROCEDURE VIDEO: [ExcellenceInDermatology.com](https://www.excellenceindermatology.com) → [Education Library](#) → [Videos](#)

TIP

- Take several samples to increase the likelihood of selecting a diagnostic area
- Request a complete microscopic description, not just a diagnosis, as this may help a dermatologist determine the cause of the problem
- Send the samples to a pathologist with an interest in dermatology as they are more likely to be able to match the microscopic changes with a specific etiologic diagnosis
- Provide the pathologist with a list of differential diagnoses and describe the signalment, clinical pattern and lesions seen, and past therapies

TECHNIQUE IMAGES : SKIN BIOPSY



Multiple syringes filled with allergens for intradermal testing



Equipment needed for performing a skin biopsy



The punch is held at right angles to the skin and turned in 1 direction applying pressure



Remove by gently grasping the base of the punch with forceps, elevating and cutting.



DIAGNOSTIC TECHNIQUES

SUPERFICIAL SKIN SCRAPING

CONTENTS

WHEN DO I DO IT? : 7.1

WHAT CAN I FIND? : 7.1

WHAT DO I NEED? : 7.1

TECHNIQUE IMAGES : 7.2

HOW DO I DO IT? : 7.3

TIP : 7.3

WHEN DO I DO IT?

- On every patient with pruritic or scaly skin

WHAT CAN I FIND?

- *Cheyletiella sp.*, *Scabies sp.*, *Notoedres cati*, *Otodectes cynotis*, or lice → A finding of one of these mites or their eggs is diagnostic
- Dermatophyte spore infested hairshafts

WHAT DO I NEED?

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

SKIN SCRAPING EQUIPMENT VIDEO: ExcellenceInDermatology.com → [Education Library](#) → [Videos](#)

TECHNIQUE IMAGES : SUPERFICIAL SKIN SCRAPING



Crusts on the edge of the pinnae caused by *Sarcoptes scabiei* infestation



Scaly dog skin caused by *Cheyletiella* mites (Courtesy: F. Albanese, F. Leone)



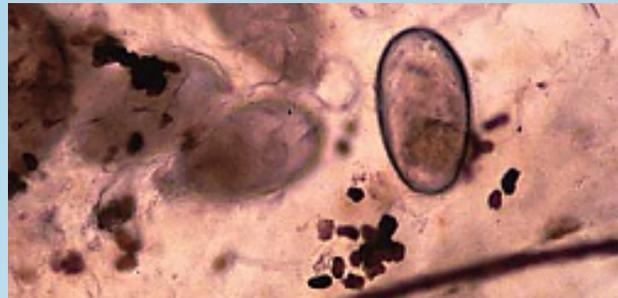
Put several drops of mineral oil directly onto clipped areas (Courtesy: F. Albanese, F. Leone)



Place oil and debris onto slide, scrape several large areas, prepare slides for evaluation



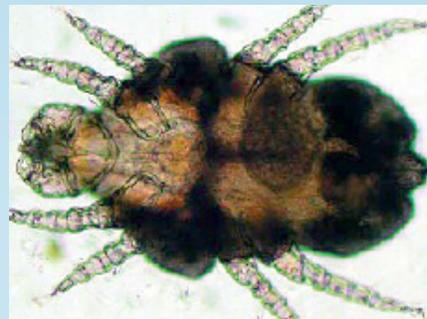
Scrape ear margin



Sarcoptes scabiei fecal pellets and egg



Sarcoptes scabiei
(Courtesy: F. Albanese, F. Leone)



Cheyletiella blakei
(Courtesy: F. Albanese, F. Leone)



Otodectes cynotis
(Courtesy: F. Albanese, F. Leone)

HOW DO I DO IT?

- If necessary, gently clip the affected area(s) leaving 2-3 mm of hair so that the scales and crusts are not dislodged. Put mineral oil on your scalpel blade and several drops directly onto the skin.
- The oil is gently scraped off with the scalpel blade and the material is put on one or more slides. These mites live on or within the surface layers; there is no need to draw blood with a superficial skin scrape.
- Examine slides under microscope with the condenser down

SKIN SCRAPING PROCEDURE VIDEO: [ExcellenceInDermatology.com](#) → [Education Library](#) → [Videos](#)

TIP

- Sample the areas where the mites you are looking for are most likely to be found. For *Sarcoptes* spp. this would be ear margins, elbows, hocks and ventral body.
- Mites may be hard to find. The bigger the surface area scraped, the better the chance of a positive result. In the case of a negative result and *Sarcoptes* mites are still suspected a diagnostic therapeutic trial over a 6 week period is the most definitive next step.
- Some people prefer to use adhesive tape to collect *Cheyletiella* mites or lice. With this technique, the tape is pressed over multiple sites of scaling and is also dragged across the hair shafts. The tape is placed directly onto a glass slide over a drop of mineral oil and is again viewed with the condenser down.
- When Dermatophytosis is suspected, use only the minimum amount of oil necessary to “fix” or “hold” the hairs, surface scale and debris.



DIAGNOSTIC TECHNIQUES

TRICHOGRAM

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WHEN DO I DO IT? : 8.1

WHAT CAN I FIND? : 8.1

WHAT DO I NEED? : 8.2

HOW DO I DO IT? : 8.2

TIP : 8.2

TECHNIQUE IMAGES : 8.3

WHEN DO I DO IT?

- In every patient with alopecia
- To look for broken hair tips when one suspects self-induced alopecia
- To determine if hairs are in anagen or telogen phase (the interpretation of ratios of telogen hairs to anagen hairs in dogs is breed and season-dependent and exact ratios have not been established)
- When dermatophytosis is suspected
- To identify dogs with color dilute haircoats
- As an alternative to a deep skin scraping when Demodex is suspected

WHAT CAN I FIND?

- Broken off hair tips → caused by self-trauma
- Tapered hair tips → hair loss is caused by events within the follicle e.g. endocrine disorders or inflammation involving the hair follicle

- Hairs in anagen (growing) phase → roots of anagen hairs are rounded, curled, bent and often smooth and pigmented
- Hairs in telogen (resting) phase → roots of telogen hairs are lancet-shaped and lack pigmentation, although the base of the hair may show a roughened or brush-like edge
- The presence of numerous anagen phase hairs should decrease the suspicion for an endocrinopathy
- In the case of dermatophytosis, affected hairs are covered with spores and penetrated by hyphae
- Color dilution alopecia → melanin is clumped in the hair shaft

WHAT DO I NEED?

- Forceps/hemostat or rubber covered clamp, mineral oil, slide, cover slip, microscope

HOW DO I DO IT?

- Pluck a small number of hairs in a partially or completely alopecic area using forceps/clamp in direction of hair growth; hold the forceps/clamp close to the skin surface and grasp all hair shafts which emerge
- Put a drop of mineral oil onto a slide, place the hairs in parallel order on the mineral oil, separate them to evaluate roots and tips adequately
- Cover hairs with a cover slip and evaluate with the microscope

TIP

- Cover the tips of your forceps or clamp with rubber or silicon sleeves to avoid crushing or breaking the hair shafts.
- You can also use the trichogram technique to look for *Demodex* mites in affected areas that are difficult to scrape (e.g. close to the eye, pododermatitis). Ideally a 1-2 cm² area will be plucked, the same area as with a skin scraping.
- You might find *Demodex* mites hanging on the hairs or sometimes hiding behind them. Only positive results are diagnostic.
- You can also find lice, *Cheyletiella* mites and their eggs.

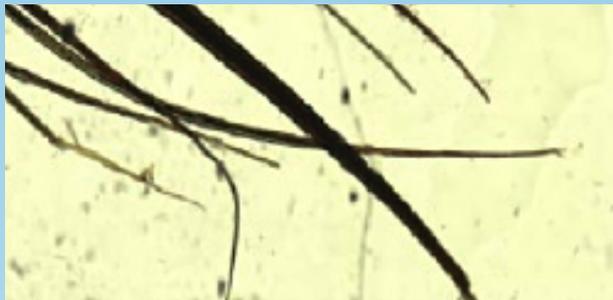
TECHNIQUE IMAGES : TRICHOGRAM



Sampling hairs for a trichogram
(Courtesy: S. Bettenay)



Trichogram with pointy hair tips
(Courtesy: S. Bettenay)



Trichogram with broken off hair tips
(Courtesy: S. Bettenay)



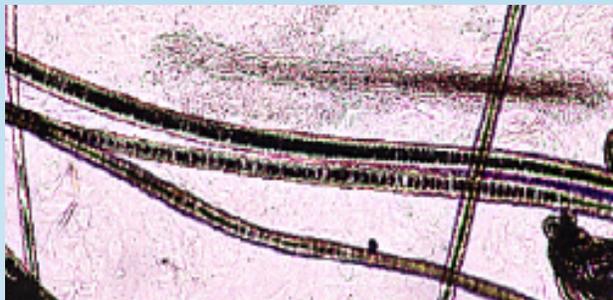
Hair bulbs in anagen phase
(Courtesy: S. Bettenay)



Hair bulbs in telogen phase
(Courtesy: S. Bettenay)



Demodex canis: two adult mites and one larva on a hair bulb (Courtesy: F. Albanese, F. Leone)



Dermatophyte spores in the hair



Color dilution alopecia - macromelanosomes
(Courtesy: F. Albanese)



DIAGNOSTIC TECHNIQUES

WOOD'S LAMP EXAMINATION

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WHEN DO I DO IT?

- In every patient with possible *Microsporum canis* infection (inflammatory and non-inflammatory alopecia)

WHAT CAN I FIND?

- Fluorescing hairshafts

WHAT DO I NEED?

- Wood's lamp

HOW DO I DO IT?

- Illuminate the affected area in a darkened room. In 50 - 60% of *Microsporum canis* infections there will be greenish fluorescence which runs along the hair shafts.
- In the case of negative results → perform a fungal culture using the McKenzie toothbrush technique (see: Fungal Culture, Tip).
- Pluck hairs with fluorescence along hair shafts and use them for trichoscopy and/or fungal culture.
- Cultures can be done in the clinic using a commercial DTM tube or plate or sent to an outside laboratory for culture.

WOOD'S LAMP PROCEDURE VIDEO: ExcellenceInDermatology.com → [Education Library](#) → [Videos](#)

TECHNIQUE IMAGES : WOOD'S LAMP EXAMINATION



Wood's Lamp (Courtesy: S. Peters)



Positive fluorescence in feline dermatophytosis (Courtesy: S. Peters)



Positive fluorescence in feline dermatophytosis (Courtesy: S. Peters)



Microsporum canis: fluorescence running along hair shaft (Courtesy: Teton New Media)

TIP

- Drugs, soaps and bacteria (*Pseudomonas sp.*) or occasional individual scales can fluoresce as well, but they should not be associated with the hair shafts
- Be careful: A lack of fluorescent areas does not rule out dermatophytosis