Skin Scrape

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• Each booklet illustrates one way to perform a skill and it is acknowledged that there are often other approaches. Before using the booklets students should check with their university or college whether the approach illustrated is acceptable in their context or whether an alternative method should be used.
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Year Group: BVSc4 +
Equipment list:
Skin Scrape

Equipment for this station:

- Kiwi fruit
- #10 scalpel blade
- Liquid paraffin
- Glass microscope slides
- Wax marker crayon
- Cover slips
- Gloves
- White coat (available in the corner of the CSL next to the lab station)
- Incontinence sheet or paper towel

Considerations for this station:

- There are useful supporting videos available on Blackboard (> eLearning - CVS 2 > Dermatology videos)

Anyone working in the Clinical Skills Lab must read the ‘CSL_I01 Induction’ and agree to abide by the ‘CSL_I00 House Rules’ & ‘CSL_I02 Lab Area Rules’

Please inform a member of staff if equipment is damaged or about to run out.
Clinical Skills:
Skin Scrape

Before taking a skin scrape, it is important to have all the equipment ready (see list on previous page).
N.B. In practice, typically several slides are prepared.

Place the slide on the incontinence sheet and label it with the patient's details and date (in this case use, your name, surname and today's date) using a wax marker crayon.

Place one drop of liquid paraffin in the centre of the microscope slide ready for the scraped material. Liquid paraffin acts as a mounting medium which helps to make the detection and identification of ectoparasites easier. Remember - liquid paraffin will also mark clothing so handle with care.

Choose a few suitable sites on the animal for sampling. In a live animal clip the hair from these areas to reduce the amount of hair on the slide.

Areas immediately adjacent to papules, crusting or lesions tend to be good places to sample.

If there is crusting or scaling try to avoid displacing it when clipping as these should be included in the sample.

Apply one drop of liquid paraffin to the skin surface (in this case, the kiwi fruit).
Clinical Skills: Skin Scrape

Spread the liquid paraffin over the area using your finger. The liquid paraffin will help prevent the sample that is collected from dropping off the blade.

With a live patient, it is helpful to pinch the skin between your thumb and index finger and gently roll it prior to scraping. This will help to force deeply bedded parasites (Demodex mites) from the hair follicles, closer to the skin surface.

Hold the blade at a 45° angle to the skin surface, with the point slightly up and the majority of the flat part of the blade in contact with the skin – this allows collection of plenty of skin debris. This also helps protect the animal from any accidental cuts during collection of the skin scrape or if the animal moves.

Holding the kiwi fruit firmly on the table, scrape the surface by repeatedly moving the blade sideways and away from yourself (red arrows).

When working on a live patient either hold the skin taught...

.....or continue to pinch it, in order to perform the scrape.

The scraping movement should also follow the direction of the hair (if possible).
Clinical Skills:
Skin Scrape

13. Continue to scrape until there is a slight capillary ooze.

N.B. Be careful not to incise the skin.

If there is a lot of blood in the sample it will be more difficult to examine.

14. The scraped material will now be visible on the edge of the blade.

15. The material is transferred to the pre-prepared slide/s by tapping the blade in the drop of liquid paraffin.

16. Alternatively, gently scrape the collected material off the blade using the edge of the glass slide.

17. Once the sample is on the slide, place a coverslip (indicated by the dotted yellow line) over the area and gently press onto sample; ensure there are no air bubbles. Ensure there is enough liquid paraffin to completely cover the sample. The slide is now ready to be examined under a microscope.
Resetting the station:

Skin Scrape

1. Please dispose of used microscope slides, coverslips and blades in a sharps container
2. Please wipe up any spilt liquid paraffin
3. Leave the workstation clean and tidy
4. Anything contaminated with liquid paraffin, the sample etc. (e.g. tissue, paper towel, etc.) must also be disposed of in a clinical waste bin

Station ready for the next person:

Please inform a member of staff if equipment is damaged or about to run out.
I wish I’d known:
Skin Scrape

• Areas with crusted papules are the best areas to scrape when looking for sarcoptic mange
• Deep skin scrapings are required to find demodex
• What am I looking for? Some examples of skin scrape findings:

Canine *Sarcoptes scabiei* egg

Adult *Sarcoptes scabiei* mite

*Demodex canis* in various stages

Adult demodex mite

Demodex egg

Juvenile demodex mite