In many types of skin disease it is necessary to collect samples of the skin so that they can be examined under the microscope. This allows us to look for characteristic microscopic changes and establish a diagnosis.

The process of sampling the skin is called a biopsy, and the microscopic examination of that sample is called histopathology.

There are many different reasons why a biopsy sample is necessary, including lesions that are non-responsive to previous medication, severe progressive disease, ulcerative disease, vesicular disease, identification of tumour types to establish prognosis, and confirmation of disease where the treatment is potentially dangerous to the animal. Regardless of the reason, the primary aim is to establish the correct diagnosis so the right treatment can be given.

Collecting the samples from the correct locations is critical to establishing a diagnosis, and this is the advantage of having a specialist dermatologist examine your pet and select the appropriate sites to biopsy.

KEY POINTS

Many different diseases can have a similar appearance and microscopic examination is needed to tell them apart.

Biopsies are also collected where the diagnosis may be reasonably certain but it is vital to confirm it as the treatments are potentially dangerous.

The samples are normally collected under sedation with local anaesthetic at the biopsy sites but some areas (nose, around the eyes, footpads, nails) require a general anaesthetic.

Once the samples have been sent to the laboratory the processing time is generally around 1 week.

The sutures (stitches) generally remain in place for 7 – 10 days. The animal should not be washed while the sutures are in place.
What are the steps involved?

1. **Identify lesion**
2. **Mark site**
3. **Local anaesthetic is injected into biopsy site**
4. **Sample is collected using biopsy punch**
5. **Biopsy site**
6. **Biopsy site is sutured**
7. **Sample ready for submission to laboratory**
8. **Sample ready for viewing under microscope**
9. **Microscopic view of skin**