

# Fine needle aspirate

### What is a "fine needle aspirate" and why does my vet want to take one?

Despite what some may say, it is impossible to tell what a lump is just by feeling it. We can make an educated guess as to what would be most likely given your pet's age, breed and the location of the mass, but to be more certain we need to assess cytology. Cytology is looking at cells under the microscope to identify them and decide whether they look like normal cells or if they are showing signs of turning into something more sinister. This can help inform us how best to move forward and recommend the appropriate intervention for your pet.

#### How do you do it?

To get a sample of cells to look at we can conduct a fine needle aspirate biopsy (FNAB) – we insert a needle into the lump or swelling and redirect it a few times before gently transferring the cells onto a microscope slide with a syringe full of air. It is almost like an injection in reverse and there may be some momentary discomfort when the needle is inserted (comparable to your pet receiving a vaccination) but they should recover quickly afterwards; most lumps have little sensation beyond the skin. Generally, there will be little to no bleeding, but some bleeding from the site can be normal. Rarely some lumps do bleed more than others and your vet may place a bandage or dressing afterwards to help with this.

The great advantage of this FNAB method is that it can be done quickly in a consultation; there is no need for any sedation or general anaesthetic. The diagnostic value is dictated by the number of cells harvested. Some lesions shed cells easily, so we can collect enough with a single needle to make a diagnosis, but some other tissues (such as fibrous tissue or bone) do not shed cells so easily, meaning little material can be collected. FNAB samples which do not yield enough cells to form a diagnosis are deemed inconclusive. In these cases, when cytology cannot provide us with an answer, removing all or part of the lesion (usually with your pet under a general anaesthetic) and sending the lump itself away to an external laboratory for histology (tissue analysis) can give a more conclusive diagnosis.

## What else is it useful for?

Cytology isn't limited to just lumps and bumps. We can also look at fluids (such as urine or joint fluid), swabs taken from ears or wounds, hair plucks and blood smears. If we can get a sample on a microscope slide, we can have a look at it. Your vet will recommend this procedure in a variety of situations and will explain the benefits for your individual animal.

#### When will I hear of the results?

There are some conditions that are easy to recognise in house; our vets can assess the slide themselves to provide an answer. For most samples, it is recommended to send to an external laboratory where a Pathologist will usually provide a report of the results in under a week.