# #51: Aspirate of just jiggle? (And other sampling questions answered.)

With Dr Rebekah Liffman

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SVS consists of Vetpath in western Australia and the NT, QML if you're a Queenslander, Vetnostics in New South Wales and the ACT, TML in Tasmania, and ASAP laboratory in Victoria and South Australia.

## Blood sampling pro-tips:

1. History: We don't need a big history. Just why you're sipping the sample, what you want them to look for, any treatment the animal is on.

2. For coagulation testing the correct tubes are incredibly important. If they are under- or overfilled they're useless, and also if the tubes are expired.

3. For exotic animals where you can't get a lot of blood call the lab to discuss: you can sometimes use LitHep tubes to do both biochem and haematology.

4. Be very carful about contaminating our serum sample with EDTA. This will cause an artificial increase in potassium reading and low Calcium.
   *NOTE: If you ever have a really high potassium and you're worried your animal is dying - check the calcium, and if that is very low, it's probably contamination.*

## Tips for better FNA's (and happy pathologists!)

1. **Don't just send in one smear!** Try and get four or five FNAs of your sample. That might produce five to 10 slides.

2. **Pre-stain** one of your lists to ensure you have some cells in your sample. (Don't worry about sending in stained slides - they re-stain them anyway.)

3. **Suction vs not**:
   - If you're likely to get a lot of blood contamination, eg liver or spleen, probably don't use suction. Also for lymph nodes where you have really fragile cells probably stay away from suction.
   - Firm masses like a sarcoma or a carcinoma suction might be indicated.

4. Apply **minimal pressure** when you make the smear.

5. **Ultrasound gel** will ruin your slides. Clean if of thoroughly before you aspirate!

6. Label you slides with **penci**l. Pen washes off!

## What's worth FNA-ing?

**Spleen**. Yes, particularly if you have a big mass. If you have splenic nodules there's a very good chance that it's just going to be lymphoid hyperplasia.

**Bone lesions**. Pathologists can quite reliably make a diagnosis of osteosarcoma or fungal osteomyelitis from cytology.

**Mammary masses.** Not so good. There's often inflammation and often you just see epithelial cells.

**Cystic lesions.** Don't bother.

**Prostate**. Very good for neoplasia, infection or even benign prostatic hyperplasia. Prosthetic washes can still be really useful, but the cells are often not quite as nicely preserved. (Note metastasis or seeding into the needle tracks is a low risk

## What about CSF?

Sample needs to get to lab within about 12 hours (overnight shipping is usually fine) cell morphology.

However, the lab can still get accurate cell counts and protein concentrations in an older sample, so might still be worth sending, even if you can't get it to the lab immediately.

Note: For CSF - the difference between a normal sample and an abnormal one is often quite dramatic.

Note: If the animal is on treatment (even steroids) but still not better, then the sample will probably still reflect the problem. If the steroids mean that the animal was better, then that's what the lab is going to see, if they're still sick it's still worth having a look.