TECH TALK

Veterinary Technician Skill-Building Tips

1. Simple Cytology

- Make sure the amount of sample on the slide is evenly distributed into a thin layer. Thicker chunks of tissue may fall off the slide or be difficult to examine, as the microscope light cannot penetrate through them.
- Always examine an ear cytology sample for bacteria and yeast. The most common problems causing otitis are bacterial infections and fungal infections, like Malassezia spp. Visible bacteria should be characterized descriptively as either cocci or rods, as these may assist the veterinarian in determining an appropriate antibiotic medication. A 1 to 4+ grading system, which is a subjective measurement pertaining to how many bacteria/yeast are present on the slide, is also used for objective interpretation.
- Diff-Quik stain, a variant of Romanowsky stain, is used to quickly identify cells and bacteria. However, it does not differentiate between gram-positive or gram-negative bacteria. Gram staining may be performed to differentiate between gram-positive and gram-negative bacteria. Diff-Quik consists of a fixative (methanol) and eosinophilic (orange) and basophilic (purple) counterstains.
  - Gently dip the fixed slide into the fixative 5 to 10 times (30 seconds).
  - Dip slide into both counterstains for 30 seconds apiece.
  - Rinse with water, being careful to avoid any particle loss.
  - Air-dry until entire slide is dry, as reading too early could result in water artifacts.
*Follow manufacturer’s directions if they vary from above.

Microscopic evaluation of skin cytology can reveal Malassezia species yeast infection. (Diff Quik; original magnification 40×). David Liss, RVT, 2011

2. History/Physical Examination

Veterinary technicians can take patient histories and may perform cursory physical examinations. Although technicians cannot make a leap from clinical signs to diagnosis, they can report subjective and objective criteria to the veterinarian. Technicians can also reduce doctor time in the examination room by collecting subjective historical data from the client, which is often a lengthy process.

Following are some tips for taking histories for performing a cursory physical exam.
- Listen to the owner and ask open-ended questions. A discussion will elicit more useful information than an interrogation.
- Never scold or judge an owner; be professional at all times and simply document data.
- Remember to start an examination at the nose and end at the tail: assess and examine the mentation, eyes, ears, gums, teeth, neck, back, thorax, abdomen, gait, hips, and urogenital and anal areas.
- Make subjective assessments to report to the veterinarian. (Anal sacculitis is a diagnosis, but a red, inflamed, swollen anal area is an observation).
- Use your senses to pick up on physical exam abnormalities. There is no substitute for using your eyes, ears, nose, and hands to fully assess the patient.
Anesthesia

Anesthetic protocols should always be created by a veterinarian. However, a technician with adequate training should be able to deliver anesthesia and to alert the veterinarian both when the patient is ready for surgery or if a problem occurs during the procedure. This allows the veterinarian to perform other tasks. Below are some “tech tips” for anesthesia.

- Inflating the endotracheal (ET) tube cuff with a subjective amount of air is not correct. Instead, once the patient is intubated, the breathing circuit should be connected and fresh oxygen started. The pop-off valve should be closed and the ET tube cuff should be inflated just to the point that a seal is created and a leak can no longer be auscultated. Then the pop-off valve can be opened and gas anesthesia initiated.

- A working knowledge of anesthetic monitors and their meaning is imperative: hypotension is commonly encountered in anesthesia. Know how to recognize and treat this.

- A pulse oxygen level of less than 98% means there is significant hypoxemia present in a patient under anesthesia being supplied 100% oxygen. Don’t settle for 94% or greater!

- Not every patient needs the same gas anesthesia setting. Titrate the vaporizer setting based on the patient’s individual needs.

Client Call-Backs

Veterinary technicians can advise clients of lab results, suggest further consultations, or assist in making future appointments with the client when the pet has uncomplicated medical problems. Technicians are responsible for the “care and feeding” of the veterinary client, and are primed to answer questions regarding medication administration and pet well-being.

Tech Appointments

If a valid veterinarian–client–patient relationship exists and a veterinarian is overseeing a pet’s care, practices can set up technician appointments in between regular physicals where techs can administer vaccinations (depending on the state), consult on the progress of nutritional or dental wellness plans, and coordinate follow-up testing (blood glucose curves, ACTH stimulation tests, thyroid testing, and other chronic treatments). Test results must be reported to a veterinarian for interpretation, but the intake, history, and diagnostics can be performed by a veterinary technician. This allows the practice to schedule 2 streams of appointments: veterinarians can see some clients for longer allotted times and may follow up with others (when clinically appropriate) through their veterinary technicians.