A Room with a View

Lynelle Johnson is performing a bronchoscopy on “Brinkley,” a Golden Retriever. In the Small Animal Clinic, few people are more experienced with the procedure than Johnson, an associate professor who specializes in respiratory diseases of pets. “About 75% of my patients require either rhinoscopy or bronchoscopy,” she states. These procedures involve placement of a lighted camera into the nose or lungs to document disease processes.

She guides the scope slowly past the animal’s mouth and trachea to examine all the airways. The camera on the tip of the lighted wand shows images on a monitor overhead. “It is always important to search out possible foreign bodies,” she tells the students who have gathered to observe and learn.

The Small Animal Internal Medicine Service embraces endoscopic techniques because they are so effective and less invasive than exploratory surgery. The instruments, sized and shaped for specific animal types and body systems, may also aid in removing foreign objects from the nose, lungs, or stomach, or in performing laser lithotripsy for stones in the urinary tract. Valerie Walker, RVT, and a half dozen other veterinary technicians keep the many scopes in optimal condition and assist with procedures.

Indications for a bronchoscopy include chronic cough—Brinkley’s current complaint—relapsing pneumonia, airway foreign bodies and airway collapse. Each patient receives screening for anesthesia issues, bleeding tendencies and other considerations.

Johnson first diagnosed Brinkley with an E. coli lung infection after performing a bronchoscopy in late 2011. Now Brinkley is back. While moving the scope through branches of the lungs, Johnson notes areas where his tissues are dilated, narrowed or irritated and stops the overhead monitor’s camera to point out to her students, “The right middle lung lobe is a prime site for aspiration.” She also identifies some scarring in the lungs. “This suggests a chronic process,” she explains. Johnson and Walker push fluid into the lungs and suction out samples for testing, a process known as lavage.

After this exam, while Brinkley remains unconscious, Catherine Outerbridge, an assistant professor in the Dermatology Service, steps in to consult on a skin infection on Brinkley’s neck and a change to his flea medication to avoid interference with other medications.

“Patients often come here with multiple problems,” Johnson remarks. She frequently coordinates patient care with other clinicians in the hospital, adding, “We offer specialized instruments not available in other specialty clinics. Once a patient arrives here, we can offer every kind of expertise under one roof.”

Johnson’s clinical cases have influenced her research, she says. “I am interested in evaluating diagnostic techniques. If I can describe the diseases more clearly using a technique available to me, it is my hope that it will make diagnosis, and ultimately treatment, easier for others.”

One week later, Johnson is down in the barn, helping the large animal clinicians perform rhinoscopy on a pot-bellied pig with a nasal infection.