

“Old Ambulatory Basics”

DID YOU KNOW?

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Standing with one foot on the fence with my ambulatory instructor back in the ‘70s I had no idea how important taking time to watch and listen to the herd of beef cattle would be. Although not involved with herd health, I do feel this part of our exam may have been shoved aside in favor of higher tech approaches. A recent article by Robbins in Veterinary Medicine (Oct 2008) made similar points. So what can the sights, sounds and simple palpation tell us about our patients?

Respiratory Sounds Owners often relate new or unusual breathing sounds that they have heard. One of the most important things to ask is whether these are *new* sounds, particularly sounds they have noted while sleeping or exercising. **New sounds** sleeping (mouth closed) typically are associated with bilateral nasal or nasopharyngeal disease, tumors commonly. These animals often have “**fitful sleeping**” as they can not breathe through their mouth while asleep and wake themselves (and owners) up during the night. Sounds on exertion (mouth open) may be laryngeal in origin. **Snoring** is classically associated with soft palate elongation, worse while sleeping. **Stertor** is the sound of a “stuffy nose” and is due to airflow over/through secretions. **Stridor** is an inspiratory noise (wheeze) due to upper airway narrowing (laryngeal or cervical trachea – e.g. the classical laryngeal paralysis dog). **Wheezing** which is loudest over the larynx but occurs on expiration is usually due to diffuse lung parenchymal disease and is referred to as a **laryngeal brake** (or “self PEEP”) in attempt to maintain airway patency. Changes in an animal’s normal sounds (purring, voice) are also important questions to ask owners. Some of these sounds will be noticeable to the “naked ear” in the exam room, others may not be appreciated unless you listen to the nares, larynx and (bilaterally) the chest walls. An **expiratory snap** (heard at the end of many coughs) is an easy tip off that there is collapse of the larger airways – either tracheal or main stem bronchial collapse.

Sights

Increased muscular effort (work of breathing) that is disproportionate to the level of exertion is one tip off of significant respiratory disease, watching how the animal is breathing will usually help localize the site of involvement. Basically we are evaluating for changes in **resting respiratory rate**, increased inspiratory or expiratory **effort**, abnormal **muscle activation** (flared nostrils, thoracic inlet retraction, external abdominal oblique muscle contraction) as well as **positional changes (orthopnea)**. Increased inspiratory effort is associated with an upper airway disease while expiratory effort is nearly pathognomonic for bronchiolitis or diffuse small airway disease (classically seen in a heavy horse). **Retraction** is the visible sucking inward at the thoracic inlet due to an upper airway obstruction. **Cheek puffing** is noted on expiration with many nasopharyngeal or bilateral nasal obstructive disorders.

Palpation Techniques

Many of the above sights and sounds can also be detected on palpation. **Expiratory effort** can be seen, heard and felt (gently hold the external abdominal oblique muscles just behind the ribs, maintain this and palpate while the animal is breathing at rest). **Lung herniation** (bulging at the thoracic inlet) is seen with small airway disease as the animal makes a forceful expiratory effort and pushes the anterior lung lobes through the thoracic inlet...just like a croaking frog or a prairie chicken!

If we can help you with your cases don't hesitate to call 24/7!!

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