TRACHEAL COLLAPSE

What is it? Tracheal collapse is a chronic, progressive condition in which a portion or portions of the trachea (windpipe) collapse or flatten out making it very difficult for the animal to breathe. The trachea is a tube made out of a series of “C” shaped cartilages that are connected by a muscular membrane. The open part of the C is dorsal (or at the top of the trachea). Over time, these “C” shaped cartilages become weak and start to flatten out and the dorsal membrane can begin to sag into the center causing a narrowing of the airway.

Which animals are affected? The most common animals affected are small breed dogs, although it can occur in any dog and infrequently cats. Pomeranians and Yorkshire Terriers are among the most common breeds affected.

What are the signs? The signs of tracheal collapse can vary greatly, but almost all affected dogs have a very characteristic “goose honk” cough. The cough is usually worse during periods of exercise or excitement and may also be worsened by exposure to extreme cold or extreme heat. Smoke or other airway pollutants can also worsen signs. Affected dogs can also have periods of respiratory distress, ranging from a decreased ability to exercise and play, up to severe distress and an inability to maintain normal oxygen.

How is it diagnosed? Tracheal collapse is diagnosed based on clinical signs, radiographs, fluoroscopy (“moving” x-rays) of the neck and chest, and/or tracheobronchoscopy (looking down the trachea with a fiberoptic scope). The trachea normally should be a nice round tube, an “O” shape. In tracheal collapse, the trachea flattens out to more of a “D” shape or even flatter than that in severe cases. These imaging techniques allow us to identify which part of the trachea is/are affected and also to what extent, allowing us to then better treat the problem.

How is it treated? Treatment depends on the location and severity of the collapse. Medical management includes antitussive medications, anti-inflammatory medications, mild sedatives, and in some cases antibiotics, as well as weight loss and minimizing stress in the pet’s environment. Cases that do not respond adequately to medical management can undergo placement of a stent(s) within the trachea (this requires anesthesia but no real surgery per se), or c-ring stents placed around the trachea (this does require anesthesia and surgery) to help hold it in an open “O” shape to maximize air flow for breathing.

What is the aftercare? Most of these patients will require some continued medical management (as noted above) throughout their lives, even after surgical treatment. Tracheal collapse is a progressive disease that we cannot cure, we can simply manage it.

What is the prognosis? The prognosis for dogs with tracheal collapse is fair to guarded, depending on the severity, progression and response to therapy. Many dogs, when properly treated, can do very well and have a normal, good quality of life.

Can it be prevented? Tracheal collapse cannot truly be prevented, but we may be able to minimize the clinical signs and slow the progression by keeping the pet slender, minimizing exposure to smoke and other airway pollutants, and maintaining good dental care.

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