



Tracheal Collapse Fact Sheet

Tracheal collapse is a form of tracheal obstruction caused by flaccidity and flattening of the cartilaginous rings which support the trachea.

The condition is most often seen in toy breeds, especially the Yorkshire terrier, with the dogs' condition gradually worsening over time as the tracheal support deteriorates.

The underlying cause to this distressing disease is not clear but the current consensus is that it is likely to be multifactorial including genetic, nutritional and allergic triggers. Whatever the cause, the tracheal cartilages lose their rigidity and ability to maintain the trachea as a semi-rigid tube during breathing.

The negative pressures resulting from breathing causes the trachea in affected dogs to collapse within the neck region during inspiration (breathing in), and so cause impairment to air flow. The changes reverse when the dog breathes out with the trachea within the chest collapsing making it difficult for the dog to push air out of the lungs.

How is it diagnosed?

The signs we see in these dogs include noisy breathing and coughing – often a characteristic ‘honking’ cough may be heard. In severe cases, dogs can struggle to catch their breath. Diagnosis is most accurately made by examining the trachea by endoscopy with the dog under a general anaesthetic. Chest radiographs can also be helpful. The degree of tracheal collapse is by convention graded from I to IV, with I being ‘almost’ normal and IV being the most severe.

Treatment

Treatment of tracheal collapse still remains a contentious topic between veterinary surgeons advocating surgical treatment and others who believe surgery has no place in the management of this disease. We usually recommend initial conservative management in all cases with weight loss, management of any concurrent lung disease, and possibly anti-inflammatory, cough suppressant and bronchodilator medication.

Despite medication some dogs progress to become surgical candidates. These include dogs with grade III and IV tracheal collapse with moderate to severe breathing difficulties, or signs which do not respond to treatment and are causing a significant loss of quality of life for the dog. However, not all dogs benefit from surgery and the surgical procedure itself carries some risk of serious complications. Surgery is aimed at permanently supporting the tracheal cartilages whilst preserving the blood supply to the area.

Many techniques have been described for surgical treatment of tracheal collapse, but currently the most widely used method is the placement of C-shaped ring prostheses around the outside of the trachea. To help the dogs’ recovery an additional procedure is performed on the larynx to help maintain a good airway post-operatively.

The surgery is technically demanding and would usually be performed at a specialist centre. Although there are significant peri-operative risks and a reasonable level of surgical expertise is required for these procedures, the results of this surgery are often extremely rewarding with dogs returning to a more active and better quality of life.

If you have any further questions about tracheal collapse you should speak to your veterinary surgeon who will be able to discuss this with you more fully.

If you are concerned about the health of your pet you should contact your veterinary surgeon.