Dear Dr. Weldy's,

My little Pomeranian, Frisky, has this horrible cough! He sounds like a little goose! It seems worse after he plays with his cat brother, Wiskas, or after I take him on a walk around the block. What could be going on with my little dog?
-Worried in Wakarusa

Dear Worried,

Thank you for your question! There are many causes of coughing in dogs, including, but not limited to: bacterial, viral or fungal infections of the respiratory tract, parasites such as heartworms, heart disease, lung disease and tracheal collapse. What you are describing sound most typical of tracheal collapse. This is a hereditary condition that we see in lines of small breed and toy breed dogs like Yorkshire Terriers, Pomeranians and Miniature Poodles, to name a few.

The trachea is made of rings of cartilage that normally are firm and hold their round shape. In a collapsing trachea, these cartilage rings become soft and no longer hold their round shape. When your dog inhales, the pressure in his airway causes the trachea to collapse on itself (think: trying to drink a thick milkshake through a small, flimsy straw). This irritates the trachea and causes a honking, gagging cough. As the condition becomes chronic, the trachea can become inflamed. This cough happens more often with excitement, exercise or physically pressing on the trachea. Dogs can suffer from prolonged bouts of coughing, which can lead to respiratory distress and even death in the most severe cases. Controlling the cough is the most important aspect to prevent this from happening.

A collapsing trachea can be diagnosed in a variety of ways, depending on the severity of the disease. Most of the time, the characteristic clinical signs and a physical exam by your veterinarian are all that's needed for a diagnosis. X-rays of your pet's neck and chest as he breathes in and out may be necessary to visualize the tracheal collapse, especially if the affected area of the trachea is located within the chest cavity. If these methods fail to yield a diagnosis and your veterinarian still suspects your dog has a collapsing trachea, a referral to a specialist may be needed for advanced imaging such as fluoroscopy (a real-time x-ray that can move) or a scope of the airway (a camera is used in the airway to visualize the area of the collapse and see the condition of the airway).

If your dog has a mild case, all that may be needed is to switch from a collar to a harness and some training to help your pet minimize stress and excitement. Decrease the dog's exposure to air pollutants, dust, mold and smoke by installing HEPA filters, not smoking in the home and vacuuming frequently. Treat obesity if present and keep your pet cool in the warmer months. If the case is moderate to severe, medications such as sedatives, bronchodilators, nebulization/vaporization, steroids and other medications may be used to decrease excitement, the trachea's sensitivity and decrease secretions. The most severe cases may need surgery to correct. A stent, or rigid tube, can be placed around the collapsed area, basically forming a non-collapsing tube to facilitate easier breathing. Another procedure that is less invasive is the placement of an expandable metal stent within the trachea via a scope. Placing a stent is not a benign procedure - it comes with various risks and medical management must still be continued in these dogs.
This is a difficult disease to prevent since it usually doesn’t show up until later in life. By this point, affected dogs have already been bred, potentially passing on the condition to their offspring. Talk to your veterinarian about what would be the best course of action to control Frisky’s cough.

-Dr. Ashley Vander Wey