

Brachycephalic Airway Syndrome



What is brachycephalic airway syndrome?

Brachycephalic airway syndrome is a physical compromise to the airway of dog and cat breeds with “pushed in” faces caused by stenotic nares (narrowed nostril opening), elongated soft palate (a flap of tissue that overlaps the epiglottis partially blocking the pet’s airway) and a hypoplastic trachea (abnormal growth of the rings of cartilage that make up the trachea, resulting in a narrowed airway).

What breeds are affected by brachycephalic airway syndrome?

All pet’s with “pushed in” faces such as English bulldogs, French bulldogs, Pugs, Boston Terriers, Boxers, Shar Peis, Shih Tzus, Cavalier King Charles, Lhasa Apsos, Pekinese, Persian cats and Himalayan cats are all predisposed to brachycephalic airway syndrome because of their short noses. However, symptoms and treatment may vary depending on the individual pet and the severity of the disease.

What are the signs of brachycephalic airway syndrome?

The signs of brachycephalic airway syndrome may include loud or open-mouth breathing, panting, snoring, coughing and gagging, fainting or collapsing episodes, exercise intolerance, blue or purple gums and tongue, vomiting, and difficulty eating. An exaggerated movement of the pet’s abdomen during respiration is frequently seen in more severely affected pets. The soft tissues lining the upper respiratory tract may also be damaged or inflamed because of the large amount of force that is generated when the pet breathes. The muscles involved in respiration can be abnormally large because of the increased effort necessary for the process of breathing.

What are the dangers of brachycephalic airway syndrome?

Brachycephalic breeds are at a higher risk of overheating because they have constricted airways that prevent proper heat exchange and cooling during the panting process (the normal method for cooling in dogs); these individuals tend to pant harder causing additional swelling and inflammation of the already constricted airway. Harsh panting increases your dog’s body temperature and anxiety level because of its inefficiency. Normal excitement, moderate exercise, or warm weather can also trigger this vicious cycle. Gastrointestinal problems can also be seen in these dogs, because of the difficulties in coordinating swallowing when they are working so hard to breathe. This in turn can result in vomiting or gagging because of swallowing so much air, and/or aspiration pneumonia (bacterial infection of the lungs), due to saliva or food particles being inhaled into the lungs.

All dogs and cats with brachycephalic airway syndrome are at an increased risk associated with sedation and anesthesia, so your Banfield veterinarian will take extra precautions. Typically there are additional costs associated with the protective measures needed to provide your pet with the appropriate care he or she requires. Brachycephalic breeds often require general anesthesia versus sedation even for minor procedures because of the potential for airway blockage. Sedation without intubation (breathing tube placement) will relax upper airway tissues which increases the risk of a function airway obstruction in these pets. Your Banfield veterinarian will develop an appropriate treatment plan for your pet.

For additional information, please contact your Banfield medical team.

How will my pet's doctor diagnose brachycephalic airway syndrome?

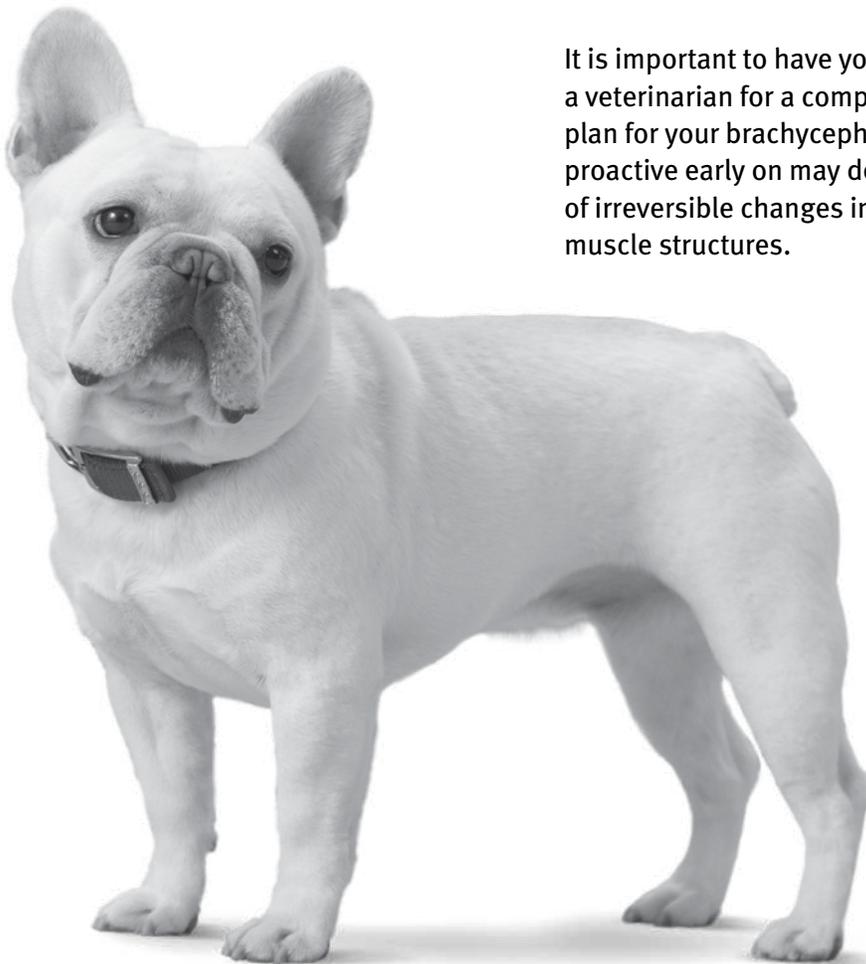
Symptoms are typically present at a young age. If you notice your pet has respiratory difficulties, discuss this with your veterinarian. Because some changes in anatomy are common to all brachycephalic breeds, diagnosis is most often made based on the extent of the abnormality.

What can I do to help my pet?

It is important to keep your pet from becoming overweight, overheating or being placed in stressful situations. It is recommended to use a harness instead of a collar as this will worsen his or her respiratory difficulties because increased body mass adds to the challenge of breathing. Problems associated with this syndrome range in severity, with most brachycephalic dogs snuffling and snorting to some degree. In more seriously affected pets, corrective surgery will often help alleviate some of the difficulty breathing. Surgical procedures for pets with brachycephalic airway syndrome involve:

- Stenotic nares repair (nostrils are surgically opened to increase the airflow).
- Elongated soft palate resection (excess tissue is removed from the soft palate).

It is important to have your pet thoroughly examined by a veterinarian for a complete diagnosis and treatment plan for your brachycephalic pet. As an owner, being proactive early on may decrease the development of irreversible changes in the airway and respiratory muscle structures.



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