Brachycephalic Breeds And Their Problems

The term brachycephalic refers to a number of dog breeds that have characteristic features involving a shortened face and muzzle. Breeds such as Pugs, Boston Terriers, Shih Tzus, and English Bulldogs fall into this category. They have been bred for their distinct appearance and with that appearance comes a combination of problems that often need to be addressed at some point in the dog’s life.

The shortened skull found in these breeds causes potential respiratory problems that can be life threatening. One of the problems involves excessive tissue in the opening of their nose. This tissue can reduce the amount of air they can take in by as much as 50%. It is easily diagnosed by a Veterinarian and can be corrected surgically. The procedure is very bloody during the surgery but once the bleeding is controlled then recovery is usually uneventful.

Another major problem with these breeds involves an elongated soft palate. The soft palate is the extension of the roof of the mouth where the bony part ends and the soft tissue continues. In brachycephalic breeds the soft palate often extends too far and interferes with the opening to the airway leading to the lungs. This interference can cause the tissue around the airway opening to inflame and scar over time. As the situation advances and more inflammation occurs the patient can have difficulty breathing and the result can be an emergency situation. One clinician at a conference I attended once described it as tapping the top of your hand consistently 24 hours a day for years. Over time the skin being tapped would become calloused and scarred. That is what happens to the airway opening. I have seen cases where just placing an endotracheal tube for anesthesia in these patients is quite challenging.

The good news is that an elongated soft palate can be surgically shortened. The procedure is straightforward and recovery is usually quite uneventful. The hardest part of the surgery is getting to the site and that involves some resourceful positioning of the patient on the operating table and creative use of lighting. In some cases it takes longer to achieve access to the site than it does to perform the actual procedure. Everything is done within the mouth and there are no sutures to remove later. Often in these cases the patient wakes up breathing better than they have in years. And once the swelling from the surgery subsides their respiration is even more improved.

We recommend any brachycephalic breed be evaluated for nasal and soft palate reconstruction early in their life. A preliminary evaluation can be done when the dog is
spayed or castrated. A good evaluation of the soft palate must be done with sedation or general anesthesia.

It is much better to have preventive surgery in cases where the nasal passage or soft palate is likely to cause problems later than to wait until those problems develop. If an emergency happens then quick action can make the difference between life and death. Some people are reluctant to have surgery when there “isn’t a problem”. But in this case it is important to remember that there is a problem but the patient just isn’t showing symptoms. It is similar to a person having a colonoscopy and the gastroenterologist finding an early precancerous polyp and removing it. The patient wasn’t having problems but I’m sure they are very happy to have the potentially future cancer removed before those problems develop. As the old adage says, an ounce of prevention is indeed worth a pound of cure.