**BRACHYCEPHALIC SYNDROME (RESPIRATORY DISTRESS)**

**What is it?** Brachycephalic syndrome is a group of problems that occur in the “short faced” breeds and result in breathing difficulties. These include abnormally small nostrils (stenotic nares), a soft palate that is too long and overlaps with the epiglottis blocking the airway (elongated soft palate), and the lining of the laryngeal saccules, little pockets in the back of the throat, evert or pooch out resulting in blockage of the airway (everted laryngeal saccules).

**Which animals are affected?** Brachycephalic (short faced) breeds are affected, especially English Bulldogs, Pugs, Boston Terriers, Pekingese, Persian cats.

**What are the signs?** The primary sign is breathing difficulty. Animals with stenotic nares may not be able to adequately breathe through their nose and so may “open mouth” breathe. They may also have increased nasal discharge or congestion. Animals with an elongated soft palate +/- everted laryngeal saccules tend to snore, have increased noise and upper airway congestion and phlegm, may cough or gag a lot and can have episodes of severe respiratory distress—become cyanotic and be unable to breathe adequately. Problems are often noticed at a young age, particularly when the pet is active. Signs can get worse over time and with maturity.

**How is it diagnosed?** Diagnosis is made based on breed, history, physical examination and examination of the nose, mouth and throat. Visual examination of the nostrils and watching for air passage from the nostrils using a mirror or glass slide aids in diagnosis of stenotic nares. Sedated/anesthetized exam of the oral cavity and back of the mouth will allow diagnosis of an elongated palate and everted saccules.

**How is it treated?** Stenotic nares are treated by surgically removing a wedge of tissue from the outer part of the nostril. When this wound is sutured closed, it then pulls the nostril outward a bit and makes a larger opening for airflow. The elongated soft palate is corrected by surgically trimming/shortening the palate so it just meets the epiglottis rather than overlaps with it. The everted saccules are simply trimmed out to remove the excess tissue. Both of these surgeries are done through the mouth.

**What after care is needed?** Patients have restricted activity for about two weeks. We try to limit excitement and exercise during this time. Once the tissues are healed, no further treatment is typically necessary.

**What is the prognosis?** The prognosis is usually very good. Complications can occur particularly at the time of surgery as these patients have increased anesthetic risks. Surgery in this area always creates some swelling and inflammation, which may also lead to temporary respiratory problems.