CUVS CASE FILES: CONGENITAL CLEFT SOFT PALATE

A 5-month old female toy poodle presented to our Emergency Service for sneezing, coughing and possible regurgitation. The puppy had a history of multiple bouts of sneezing and clear nasal discharge, which were presumed by her veterinarian to be infectious in nature, and which resolved with antibiotics. The owners described sneezing after drinking water.

On presentation to CUVS, the puppy was febrile and tachypneic, with adventitious sounds heard on pulmonary auscultation. Thoracic radiographs revealed alveolar changes consistent with aspiration pneumonia. Sedated oral examination revealed a midline soft palate defect (fig. 1) consistent with a congenital cleft soft palate. Following initiation of treatment for pneumonia, the defect was repaired by creating a split thickness incision and closing the site in two layers - nasal and oral (fig. 2). The puppy did extremely well and is asymptomatic. Antibiotics were continued for 2 weeks following radiographic resolution of her pneumonia.

All puppies should have a thorough oral examination to assess for congenital defects. Suspicions of a cleft in the hard or soft palates should be considered with those failing to thrive, unable to suckle, or those having food/water expelled from the nose after eating. Similarly, young patients with respiratory signs or rhinitis should also be carefully assessed as aspiration pneumonia is a common sequela to uncorrected palatal defects.

While it is uncommon to see only a cleft soft palate (as opposed to a cleft hard and soft palate together), these defects do occur, and should be considered as a differential diagnosis in young animals with respiratory signs. Congenital clefs can arise from a combination of genetic factors or environmental teratogens. Animals with congenital palatal defects may also have concurrent craniomaxillofacial abnormalities including abnormalities in the tympanic bullae, nasal turbinates, nasal septum, frontal sinuses and lateral ventricles, and so should be evaluated for these. Due to the heritability of this condition, animals with craniomaxillofacial abnormalities should not be used for breeding.

Prognosis can be excellent with appropriate surgical repair. As the most common complication of palatal surgery is dehiscence, the first surgery often has the best chance of treatment although multiple surgeries may be required to fix more complicated cases.