

HYPERPLASIA OF THE SUPRARYTENOID PHARYNGEAL FOLD IN BRACHYCEPHALIC AND NON-BRACHYCEPHALIC TOY DOGS: CLINICAL PRESENTATION, TREATMENT AND OUTCOME IN 6 CASES

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OBJECTIVES: to report 6 cases of hyperplasia of the suprarytenoid pharyngeal fold (HSPF) in brachycephalic and non-brachycephalic toy dogs.

METHODS: medical records of six dogs diagnosed with HSPF were reviewed. All dogs underwent endoscopic evaluation of the upper and lower airways. In all dogs the pharyngeal hyperplastic fold (**Figures 1 and 2**) was lifted with a cotton swab improving laryngeal abduction during inspiration (**Figures 3 and 4**).

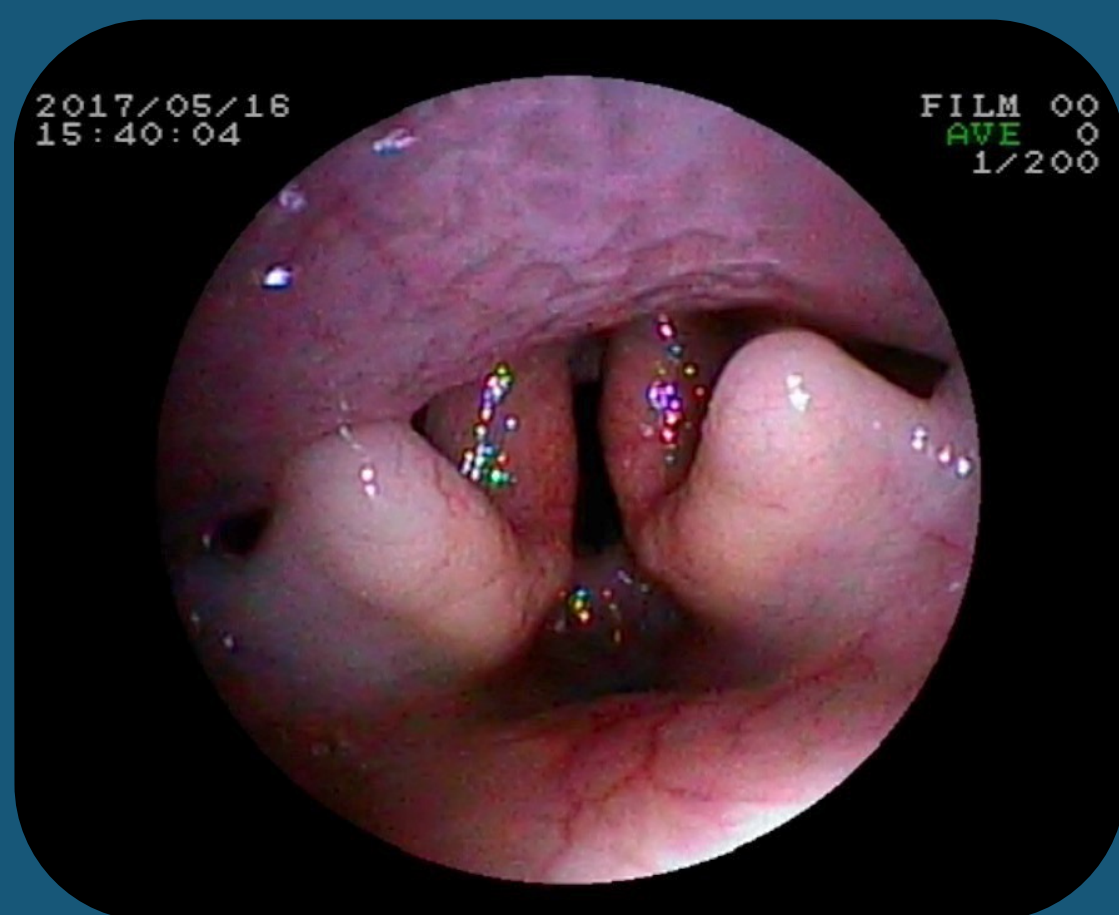
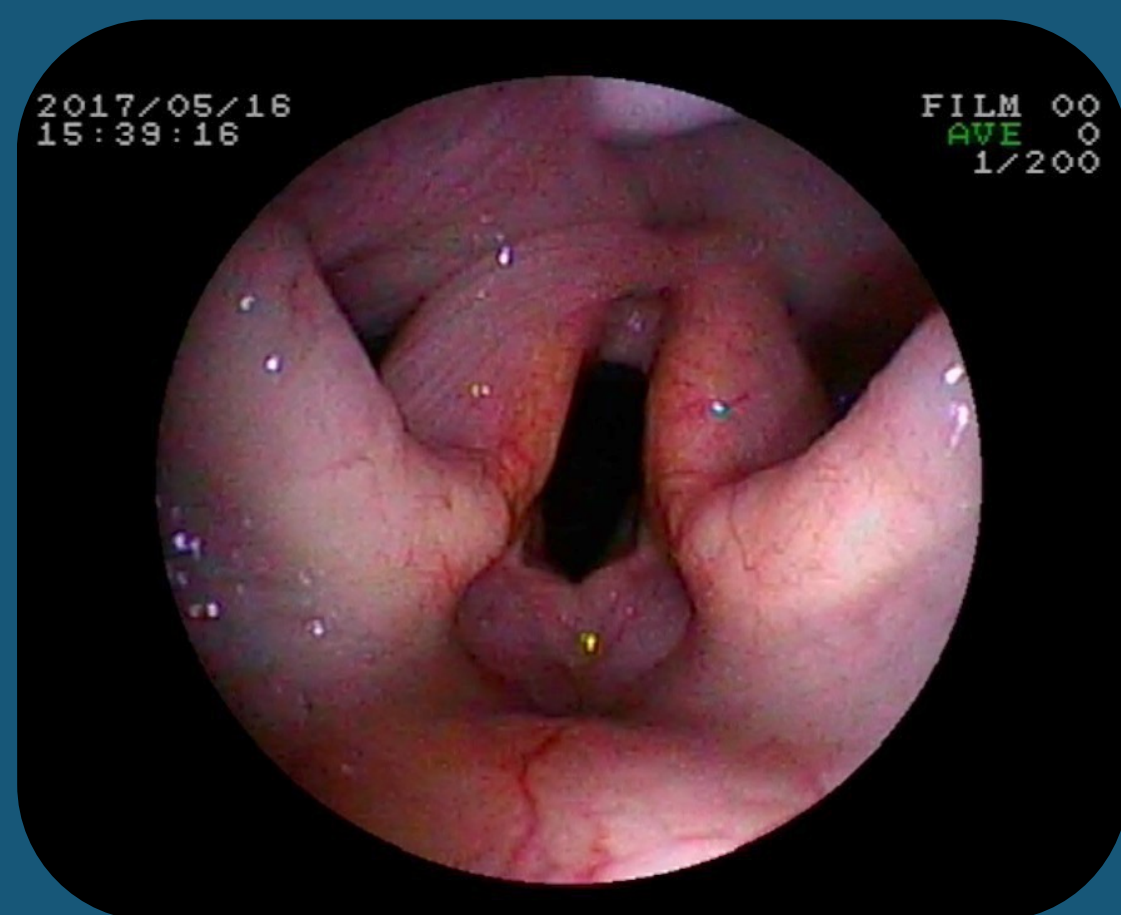


FIGURE 1 AND 3: HSPF in a 2-year-old male Chihuahua and significant improvement of laryngeal abduction, during inspiration, after lifting the pharyngeal fold with a cotton swab



RESULTS: Three dogs were Pugs, two dogs Pomeranian and one Chihuahua; three dogs were females and three males, with a mean age of 5 years. Main clinical signs were inspiratory stridor and inspiratory dyspnea in all dogs, two dogs exhibited stertorous breathing and one dog nocturnal apnea.

Main findings were HSPF with reduction of laryngeal abduction and laryngeal collapse in all dogs, two dogs had soft palate hyperplasia and two dogs stenotic nares, two dogs had bronchomalacia.

Two Pugs underwent surgical correction of the HSPF (**Figure 5**) with significant clinical improvement. One dog died of unrelated causes and the other Pug was euthanized. The remaining three dogs that showed mild endoscopic alterations, had resolution of clinical signs after therapy with inhaled corticosteroids. Mean follow-up was 16 months.

CLINICAL SIGNIFICANCE: HSPF might cause severe upper respiratory obstruction by occluding the dorsal portion of the laryngeal aditus and covering the corniculate processes of the arytenoid cartilages. HSPF might limit or block laryngeal abduction during inspiration.

HSPF might represent an underestimated disease of the upper airways and clinician should be aware of this condition when evaluating brachycephalic and non-brachycephalic toy dogs with signs of upper respiratory obstruction.

It should also be considered that muscle relaxation induced by anaesthesia and mucosal oedema might overestimate the degree of HSPF and subsequently the degree of laryngeal collapse. When lifting of the pharyngeal fold by mean of a cotton swab results in significant improvement of laryngeal abduction, surgical correction of the HSPF should be considered in dogs with severe inspiratory dyspnea. In less severe cases conservative therapy can improve clinical signs.

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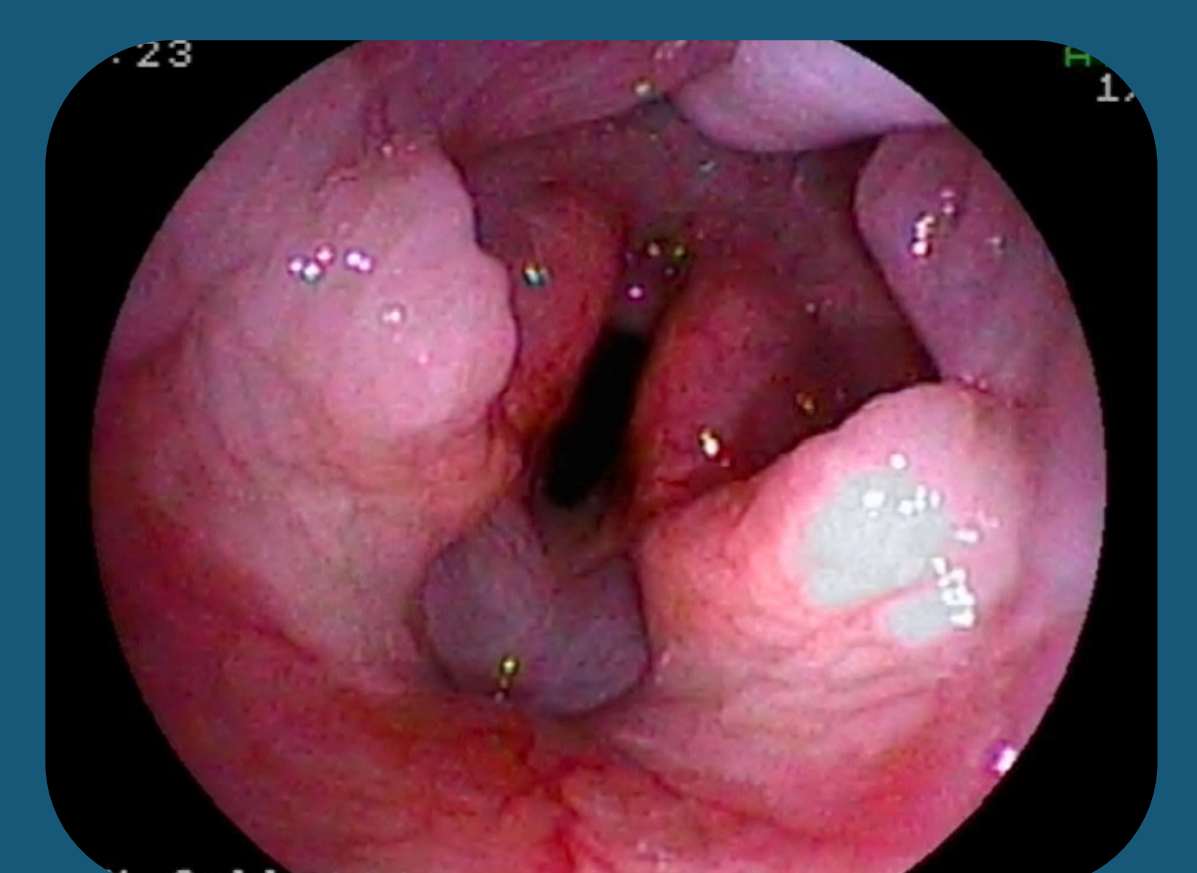


FIGURE 2 AND 4: HSPF in a 8-year-old spayed female Pug and significant improvement of laryngeal abduction, during inspiration, after lifting the pharyngeal fold with a cotton swab

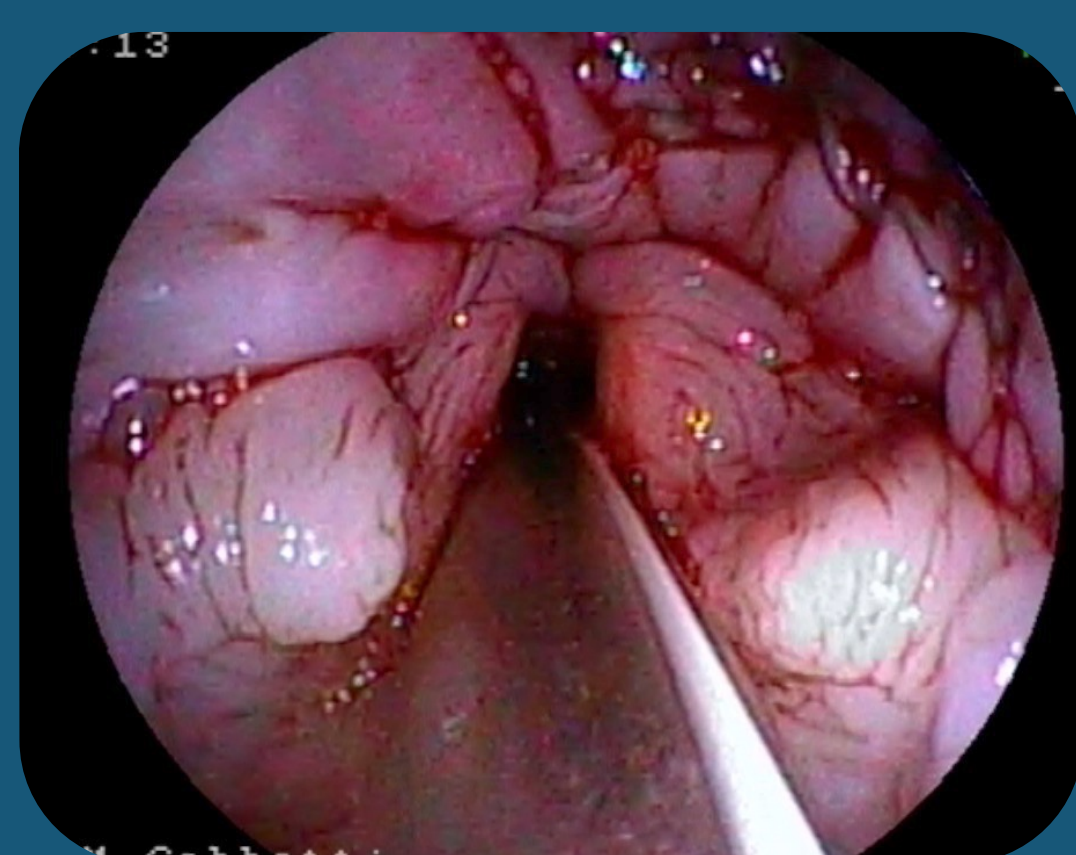


FIGURE 5: endoscopic view of the laryngeal aditus of the Pug of figure 2 after surgical resection of the suprarytenoid pharyngeal fold with the cut and sew technique

A larger case series of dogs with HSPF is warranted to better characterize this condition and the indications for surgical versus conservative management.

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