

SELECTED LARYNGEAL PROBLEMS: VOCAL FOLD GRANULOMAS

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During the last few years we have diagnosed intra-laryngeal masses in dogs on a regular basis. Most of these masses were associated with the vocal folds and were predominantly located at the vocal process. Histopathology revealed vocal fold granuloma.

In the literature, vocal fold granulomas (VFG) are described in great detail in humans and also in horses. Analyzing our data, we can summarize the following findings. All dogs with vocal fold granulomas belonged to a brachycephalic breed; the majority were French Bulldogs. Altogether nearly one third of our brachycephalic dogs had these laryngeal masses. Specific clinical signs were very difficult to separate from those of brachycephalic airway syndrome (BAS) because all these dogs were referred for surgical therapy of BAS. Except for a very few animals with large masses obstructing more than one third of the laryngeal inlet, we had the impression that these masses did not cause any additional problems other than the brachycephalic symptoms. With the exception of those masses having a colliculus shape, we removed all of the masses surgically, either with a carbon dioxide laser or with high-frequency surgery. Recurrence therapy included topical application of either mitomycin or corticosteroids or anti-acid therapy. Recurrence rate after topical administration of drugs as the sole therapy was 100%. Unfortunately, we started using the anti-acid therapy comparatively late, but there is some incidence of therapeutic success, in concordance with findings in humans.

Currently we can only speculate on possible reasons for this disease in brachycephalic dogs: (1) We know that in the course of upper airway obstruction the larynx is exposed to continuous micro-trauma due to stridor and stertor. (2) We also know that most brachycephalic breeds suffer from gastrointestinal alterations including esophageal problems. In many of our cases, we diagnosed a typical widening of the esophagus immediately cranial to the base of the heart. This cavity was filled with gastric fluid very often. A continuous contact of the glottis with gastric acids possibly causes a chemical traumatism und consecutive inflammation.

At present we can say that surgical removal together with antiproliferative therapy does not seem to prevent recurrence of vocal fold granulomas, and that there are first hints that anti-acid therapy is beneficial.

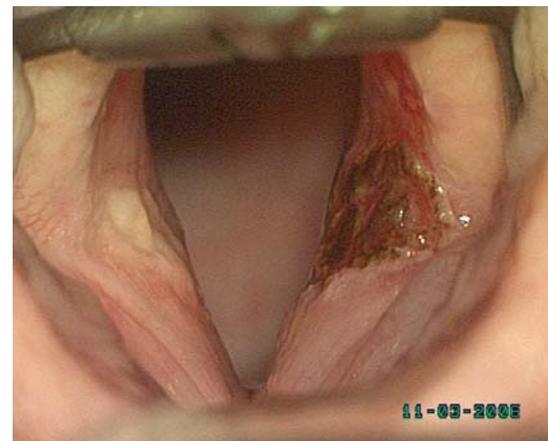
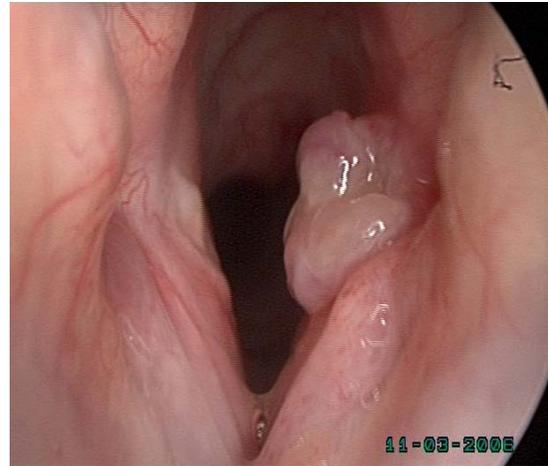


Figure 1. Vocal fold granuloma in a French Bulldog, before (*top*) and after (*bottom*) surgical removal.



Figure 2. Widening of the oesophagus cranial to the base of the heart with accumulated gastric fluids