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Objectives

- ❖ To perform a bibliographic review about the characteristics of the affected breeds.
- ❖ Review the current techniques for the correction of this syndrome.
- ❖ Survey the owners of treated patients in order to assess the improvement and quality of post-surgical life of these animals.

Introduction

Brachycephalic Syndrome (BS) is a very common disorder that includes primary anatomical components (stenotic nares, elongated soft palate, thacheal hipoplasia and aberrant nasopharyngeal turbinates) and the development of secondary changes (sacculs and tonsils eversión and laryngeal collapse).

Clinical signs

The most typically affected breeds are English bulldog, French bulldog and Pug.
Regular respiratory signs include rattle, stridor, snoring, cough, exercise intolerance, increased respiratory effort and collapse.

Surgical techniques

- ❖ Soft palate correction

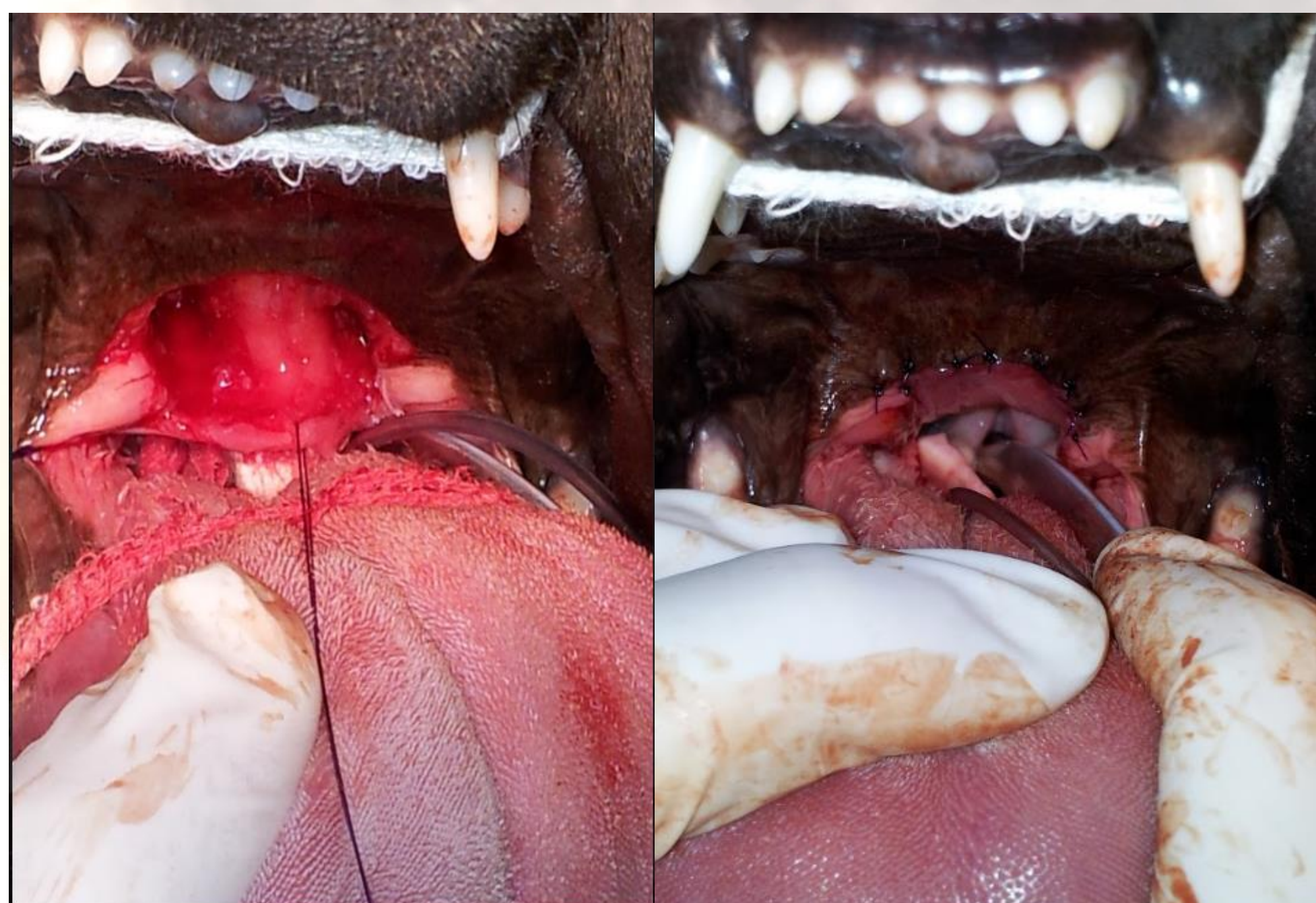


Fig 1. Folded flap palatoplasty

- ❖ Nares correction

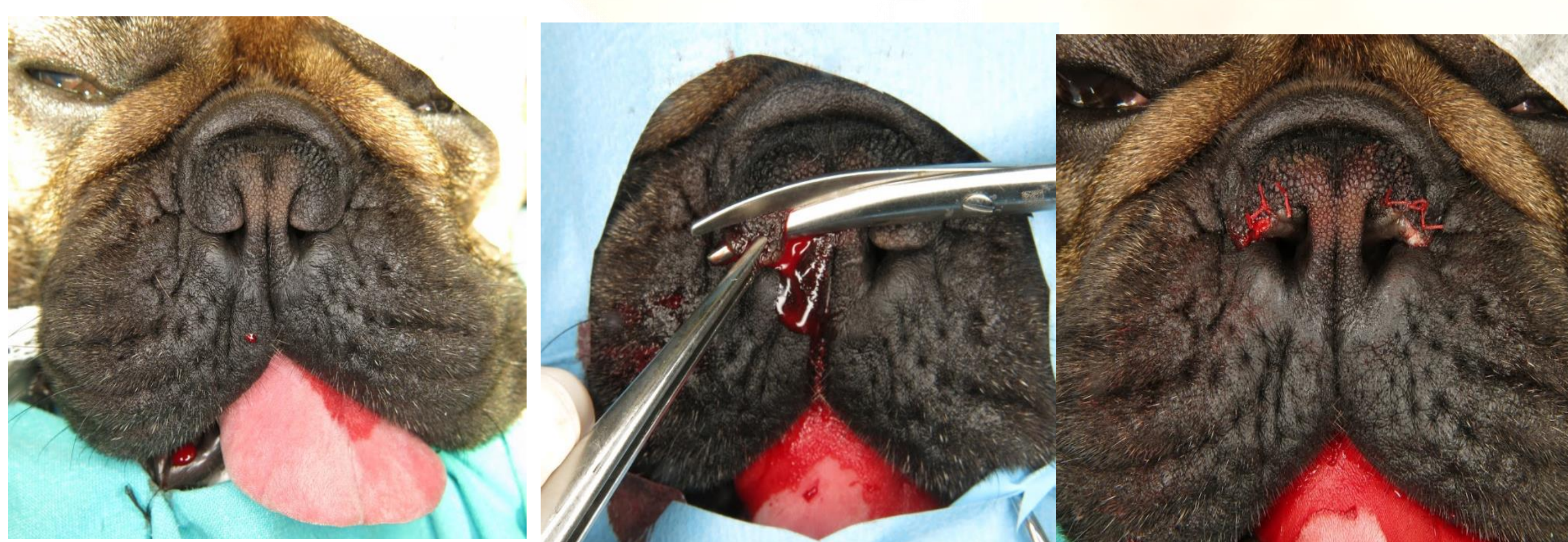


Fig 2. Alar cartilage resection

- ❖ Nasal turbinates correction
- ❖ Sacculs aversion and laryngeal collapse correction

Operated Patients

Retrospective study made with 20 patients (25% English bulldog, 40% French bulldog and 35% Pug) operated for BS between 2016 and 2018.

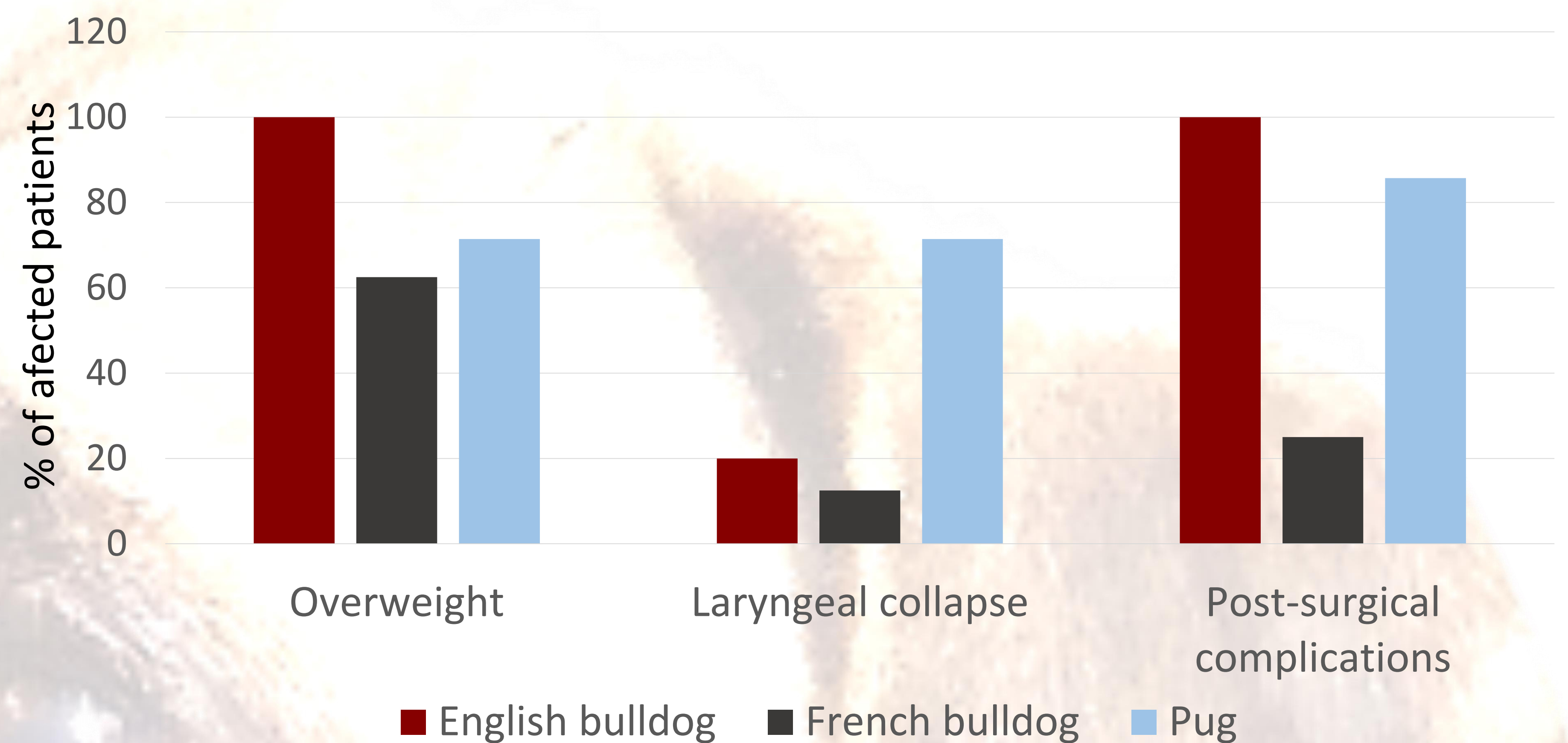


Fig 3. Findings based on breed

Study Results

Evaluating the post-surgical evolution of these animals, we can see that, in general, their brachycephalic condition improves, having in all cases a decrease in the clinical symptoms present before surgery.

Breed	Post surgery improvement	Vomiting/Regurgitation	Respiratory sounds	Exercise tolerance	Syncope
English bulldog	100%	0%	40%	80%	0%
French bulldog	100%	37.5%	37.5%	75%	0%
Pug	100%	14.3%	71.4%	42.9%	0%

Table 1. Percentage of the improvement evaluated patients

Conclusions

- ❖ The current acceptance of respiratory problems as something "normal for the breed" hinders the attempt to improve the life quality of brachycephalic dogs.
- ❖ Animals with better facial skull ratio should be selected in order to reduce the risk of suffering BS.
- ❖ Surgery at different levels in dogs that have severe brachycephalic syndrome is considerably beneficial.
- ❖ Early surgery should be considered as a prophylactic strategy.
- ❖ The owners have to be informed about perioperative risks.
- ❖ Secondary defects to the BS must be treated to ensure a better prognosis for the patient.
- ❖ Under the owners' crusher, all dogs have improved after surgery.
- ❖ The effect of surgical correction is individual and total success can not be guaranteed.