WEAR REFERRALS

Information sheets

Brachycephalic Obstructive Airway Syndrome (BOAS)







Brachycephalic Obstructive Airway Syndrome (BOAS)

What is BOAS?

BOAS is one of the terms used to describe a condition in some animals where there is narrowing and obstruction of the upper airway due to problems that the animal is born with.

Which animals are at risk?

It is usually brachycephalic (short-nosed) breeds that are affected with BOAS. The most common dog breeds affected are Pugs, French Bulldogs and English Bulldogs. Having BOAS does not automatically mean that a dog is severely affected - there is a spectrum of clinical signs ranging from barely noticeable through to collapse and death.

Cats, in particular Persians, can also be affected by BOAS.

What causes BOAS?

The initial (or primary) problems include an overlong +/- over-thick soft palate, narrowing of the nostrils and in some cases narrowing of the windpipe. The changes lead to increased resistance to breathing which then leads to further (or secondary changes) developing.

The most common and important secondary change is a condition called laryngeal collapse. This is where the larynx (the opening of the windpipe) starts to collapse and is a serious and irreversible change. Early treatment, i.e. before laryngeal collapse develops, is likely to be associated with better long-term outcomes.

What signs might I see if my dog has BOAS?

Common clinical signs are:

- Snoring
- Noisy breathing ('snoring' noises or high-pitched sounds)
- Excessive panting
- Tiring easily with minimal exercise
- Failure to cope well in warm weather
- Episodes of collapse (if the animal is severely affected)
- Regurgitation or vomiting (a common problem occurring secondary to BOAS)

Does my dog require treatment?

BOAS signs will often get progressively worse with time. If your pet is showing any of the above signs then early assessment and correction, if needed, is likely to improve their long-term airway function.

The best way to assess the airway is during a consultation where a full history can be taken and a physical examination performed. This may include exercising the dog to see how well they cope with short activity. This assessment would be carried out by our Soft Tissue Surgery department.

What investigations can be performed?

If, after an initial consultation, the surgeon and client are in agreement that further investigations are needed then these may consist of:

- Visual or camera examination of the upper airway under anaesthesia
- Imaging of the airway (for example with x-rays or a CT scan)
- Endoscopic (camera examination) of the oesophagus and stomach in patients with a history of severe regurgitation/vomiting

What about surgery?

If the diagnostic workup shows that there are problems that can be improved, surgery will likely be advised to try and alleviate some of the clinical signs associated with BOAS.

Surgery is usually performed under the same anaesthetic as the investigations in order to minimise the number of anaesthetics that a patient is receiving.

Surgery will often involve the following procedures:

- Shortening and thinning of the soft palate (palatoplasty)
- Removal of the tonsils, if they are very large (tonsillectomy)
- Removal of excessive laryngeal tissues (laryngeal sacculectomy)
- Widening of the nostrils (alarplasty)

Will my pet need to stay in hospital after surgery?

This will vary, depending on the severity of the clinical signs and anxiety levels of the dog. Many patients will stay in overnight, to monitor for any swelling of the upper airway after surgery and to give medications to ensure that they are comfortable, then will go home the following day.

Most patients will stay in our high-dependency ward after surgery where they can receive 24/7 monitoring and care.

Are there any risks with surgery?

As with any surgery there are always risks to consider. In BOAS patients the main risks are associated with anaesthesia and with any swelling that develops in the airway following surgery. The surgeon will discuss your animal's individual risks with you in the initial consultation.

We see a large number of BOAS patients at Wear Referrals and our soft tissue surgeons have extensive experience in managing this condition. We are also fortunate at Wear Referrals to have a Specialist anaesthesia service and are one of the few referral centres in the north of England to be able to offer this level of expertise.

How much does surgery cost?

The cost of surgery will vary depending on the problems that are present and which diagnostics are performed. Current surgical prices are available on our website, and the surgeon will discuss estimates with you during the initial consultation.

Is there any follow-up after surgery?

A recheck examination with the surgeon will take place at around 2 weeks following surgery.

What should I expect in the long-term following surgery?

This greatly depends on the findings of the diagnostic workup.

The majority of patients will have a significant improvement in their clinical signs and be much 'happier' dogs at home - subjective improvement is seen in more than 90% of dogs following the appropriate surgery.

If there is severe collapse of the larynx then the prognosis with 'conventional' surgery is more guarded and salvage procedures, such as permanent tracheostomy, may then need to be discussed.

What else can I do to help my dog at home?

Things that you can do at home to help with BOAS signs include:

- Using a harness, not a collar and lead
- Only exercising dogs at cooler times of the day
- Using fans and cooling aids at home during hot weather
- Making sure that your pet is a lean bodyweight (being overweight increases the demand on the airway to provide oxygen for the body)
- Feeding small, frequent meals

Can I breed from by dog if he/she has BOAS signs?

We strongly advise against breeding from any animal who shows clinical signs of, or has had surgery to correct, BOAS.

I have further questions, what should I do?

If you have already had an appointment with a soft tissue surgeon at Wear Referrals, please contact us on 01388 777770 or email the surgeon using the email address provided on their business card.

If we have not seen your pet yet, please feel free to ask any questions you may have during the initial consultation.

If your pet has had surgery and you have urgent questions or concerns, we are contactable 24/7 on 01388 777770.