

Why our short nosed friends need a little extra help when being anaesthetised.

Brachycephalic animals, for example ; Persian cats, Bulldogs, Pugs, Shih Tzus etc struggle with various inherited disorders. A big problem for many of these animals is BOAS- Brachycephalic Obstructive Airway Syndrome. This syndrome occurs due to the flattened features of their skulls which causes compression of the upper airway structures. This can cause a variety of medical problems such as struggling to breathe at rest but mostly during exercise. They may even collapse due to lack of air. They are very susceptible to overheating and developing potentially serious breathing difficulties in hot conditions as they are unable to pant efficiently.

Being a brachycephalic animal can cause an increased anaesthetic risk due to:

- Having much smaller airways than a patient of similar body weight of a longer nosed breed, which causes breathing difficulties.
- Increased incidence of regurgitation / refluxing of stomach contents which may irritate the lining of the oesophagus and nasal passages but could also be aspirated into the lungs and cause pneumonia.
- Abnormal stomach emptying which may lead to increased pressure on the diaphragm and lungs making breathing more difficult.
- These breeds are often stressed very easily and stress can exacerbate their breathing problems even resulting in airway collapse in some animals.

At PHP we take these risks very seriously and have protocols in place for these breeds which are designed to minimise their anaesthetic risk. Our aim is to pre-empt potential problems to minimise the impact they have on patients' anaesthetic. We use a number of additional measures before, during and after anaesthesia in addition to those used routinely in all anaesthetics:

- use of medications to minimise stress.
- Increased supply of oxygen which begins prior to the first dose of anesthetic drugs.
- Use of medications to assist stomach emptying and to reduce the risk of reflux and aspiration.
- Extra care from our nursing team at every stage of the anaesthetic process.

The additional safety measures that we put in place for Brachycephalic breeds do involve small additional costs but we do think they are important to make anaesthesia for these breeds as safe as possible.

If you are an owner of a brachycephalic animal and have any questions about their anaesthetic, the costs involved or any aspects of their health, please do not hesitate to ask us! We are always happy to help with any queries.