

BRACHYCEPHALIC AIRWAY SYNDROME UPDATE

Brachycephalic breeds are becoming more and more popular as pets. Both general practitioners and referral practice are seeing an increasing number of brachycephalic dogs for a variety of health conditions. Upper airway obstruction of varying severity leads to symptoms ranging from stertorous breathing and snoring, through to complete upper airway obstruction. This obstruction is typically due to a combination of abnormalities such as elongated soft palate, everted laryngeal sacculles, laryngeal collapse, and aberrant nasal turbinates amongst others.

Dr Barbara Lindsay, a former VSS intern, along with [Dr Philip Moses](#), [Dr David Cook](#) and Dr Joy-Maree Wetzel (also a former VSS intern) have co-authored a publication investigating risk factors for complications after surgical treatment of upper airway obstruction. The paper, titled '*Brachycephalic Airway Syndrome: Management of Post Operative Respiratory Complications in 248 dogs*' has recently been accepted by the Australian Veterinary Journal and is available [here](#) to AVA members through the AVJ website or Wiley online.

The key findings of the publications include

- Presentation in an emergency situation (i.e. severe dyspnoea or collapse) increases the risk of post operative complications by around 30 times.
- Presence of concurrent pathology in the respiratory system (e.g. Aspiration pneumonia) increases the risk of complications by around 2.75 times.
- Increasing age increases the risk of complications by around 1.15 times for each year of age.
- Vomiting or regurgitation were also linked to the incidence of respiratory complications.
- Around 20% of dogs with severe complications requiring re intubation or tracheostomy deteriorated more than 12 hours after surgery.

These findings support the following recommendations to mitigate the risk of complications

- Thorough pre operative investigation of all components of the respiratory system (for example thoracic radiographs or CT, endoscopic examination of the upper and lower airways)
- Proactive management of concurrent gastrointestinal pathology with antacids or antinausea medications.
- Surgical intervention at a younger age (typically around 9-12 months is ideal).
- Close post operative monitoring for an adequate time period.

Please feel free to contact the [surgical team](#) at VSS if you would like further information on the management of brachycephalic dogs.

Thanks to [Dr Philip Moses](#) for providing this update.

