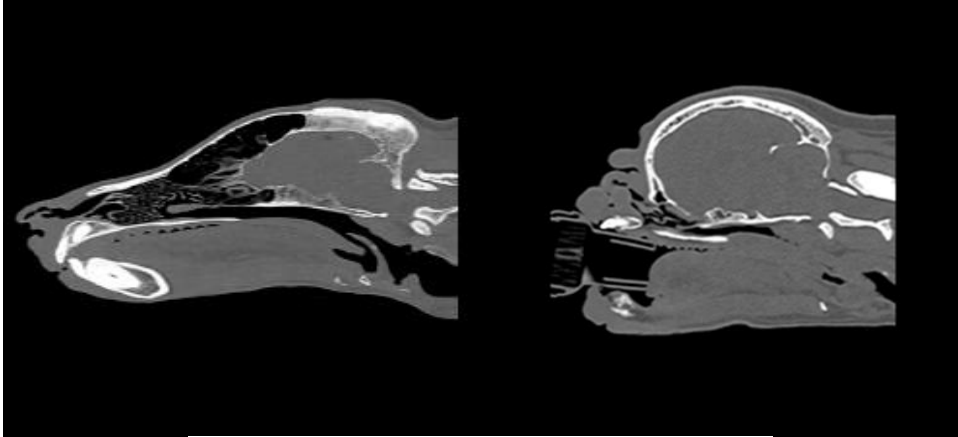


Brachycephalic Upper Airway

Brachycephalic = Short head. Usually they have a normal lower jaw and an abnormally short upper jaw.

Common breeds: Pug, Boston Terrier, French Bulldog, Bulldog, Pekingese, Shih Tzu, Japanese Chin and Boxer.

Predisposed to upper airway obstruction and respiratory distress.



German Shepherd Vs Pug

Clinical Signs:

Respiratory noise – Long/thick soft palate, narrowed/collapsed larynx, stenotic nares/deviated nasal septum/abnormal growth of nasal turbinates



Normal



Mild

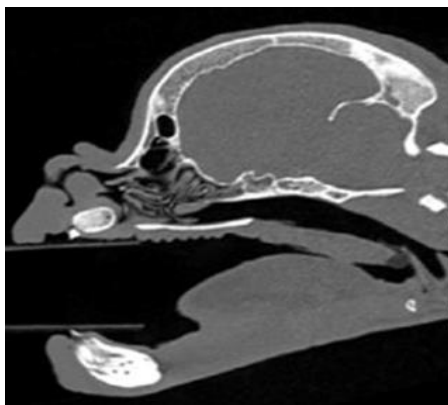


Moderate

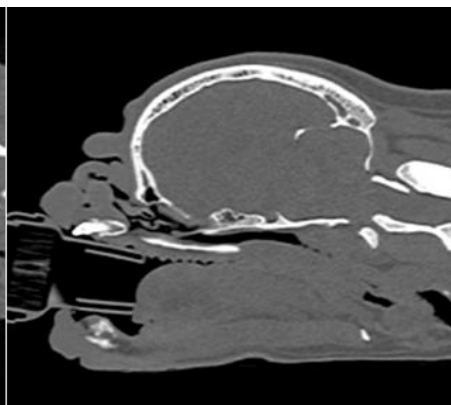


Severe

Gastrointestinal signs and difficulty eating – Excessive pharyngeal folds and elongated soft palate can impede swallowing. Regurgitation is common due to oesophageal diverticula (pouches) and/or hiatal hernia (stomach partially sliding into chest). Can cause gastroesophageal reflux.

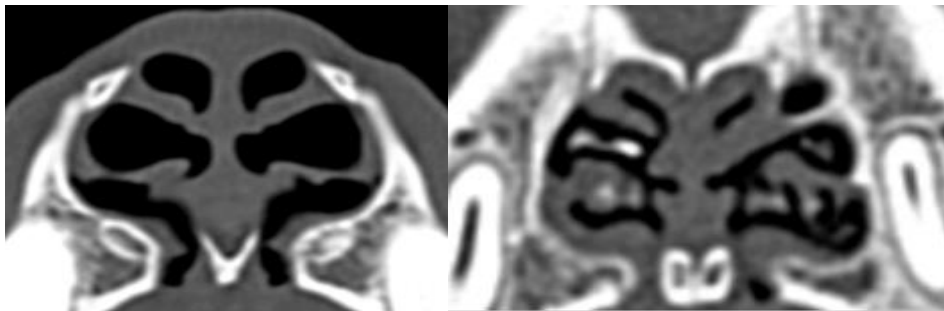


Normal Soft Palate



Thickened/long soft palate

Obstructive sleep apnoea and sleep disordered breathing – Long soft palate vibrates and causes snoring sounds, especially when sleeping. Dyspnoea (difficulty breathing) and apnoea (lack of breathing) can occur during sleep, this can be life threatening.

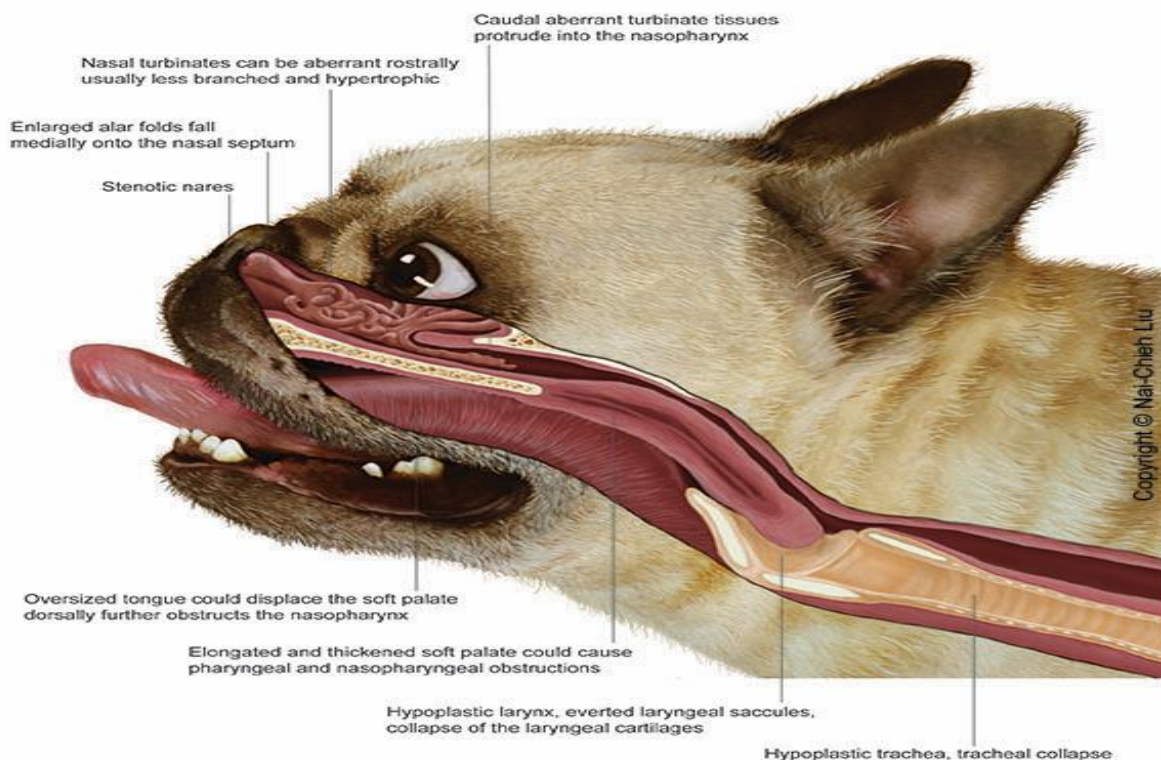


Normal Nasal Cavity

Abnormal Nasal Cavity

Heat intolerance – An obstructed nasal cavity limits heat exchange and therefore dogs can overheat during exercise, leading to heat stroke.

Cyanosis and collapse – A restricted airway means they may not be able to meet oxygen demand which can lead to cyanosis (blue tone to skin), collapse and loss of consciousness.



Grading:

Signs are not always present at rest therefore we use the '3 minute trotting exercise tolerance test'.

Grade 0 – BOAS free, annual health check if dog less than 2 years old.

Grade I – Clinically unaffected, mild respiratory signs, annual health check if less than 3yo.

Grade II – Moderate respiratory signs, clinically relevant disease and requires management – Weight loss and/or surgery.

Grade III – Severe respiratory signs, requires a thorough examination and surgery.

Pictures sourced from <https://www.vet.cam.ac.uk/boas/about-boas/>