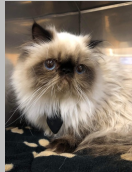


## Brachycephalic Dentistry



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## Brachycephalic Dentistry

Face a unique set of dental challenges that can impact their oral health which stem primarily from the structure of their mouths

1. Malocclusions
2. Teeth overcrowding
3. Under erupted teeth
4. Missing and/or impacted teeth
5. Brachycephalic obstructive airway disease (BOAS) -> breathing difficulties

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## Brachycephalic Dentistry

### 1. Malocclusions:

- Brachycephalic breeds are more prone to malocclusions due to their facial anatomy
  - chewing difficulties
  - Maxillary incisor contact on rostral mandibular mucosa and/or lingual surfaces of mandibular incisors
  - Periodontal disease



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## Brachycephalic Dentistry

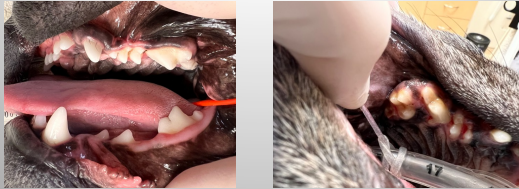
### 2. Teeth Overcrowding

- shorter jaws -> insufficient space for their teeth leading to overcrowding and misalignment
- rotated teeth
  - challenging to effectively chew their food and clean their teeth naturally
  - also facilitates plaque and tartar buildup
- Some teeth lack protective collar of gingiva
- increase the risk of periodontal disease

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### Brachycephalic Dentistry

Overcrowding



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### Brachycephalic Dentistry

Overcrowding



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### Brachycephalic Dentistry

Overcrowding



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### Brachycephalic Dentistry

Overcrowding



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### Brachycephalic Dentistry

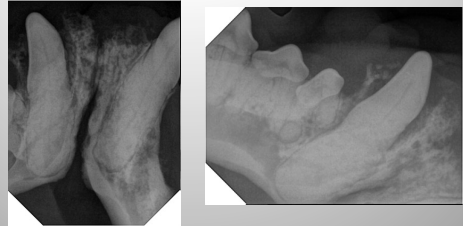
#### 3. Under erupted teeth



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### Brachycephalic Dentistry

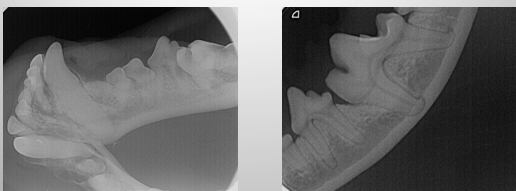
#### 3. Under erupted teeth



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### Brachycephalic Dentistry

#### 3. Under erupted teeth



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### Brachycephalic Dentistry

#### 4. Missing and Impacted teeth:

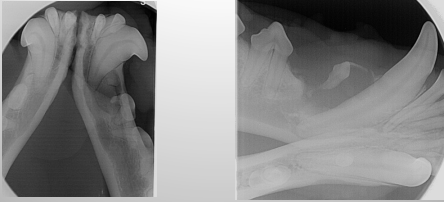
- Teeth that are in an abnormal position (i.e.: sideways)
- Teeth that have a physical resistance to eruption (excessive thickening of overlying bone and/or gingiva)



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### Brachycephalic Dentistry

#### 4. Missing and Impacted teeth – Dentigerous cysts



Treatment: Extraction and cyst surgery, assessment of canine vitality

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### Brachycephalic Dentistry

#### 4. Missing/ Impacted teeth:



Treatment: Extraction

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### Brachycephalic Dentistry

#### 4. Missing/ Impacted teeth:



Treatment: Operculectomy

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### Brachycephalic Dentistry

#### 5. Breathing Difficulties(BOAS)

- can hinder their ability to pant efficiently, making it harder for them to keep their mouths clean through natural self-cleaning mechanisms
- dry mouth

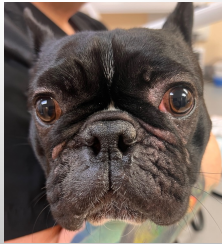


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### Brachycephalic Dentistry

Treatment:

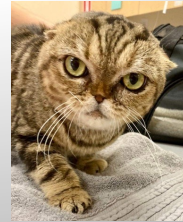
- Stenotic nares surgery
- Elongated soft palate correction (staphylectomy)



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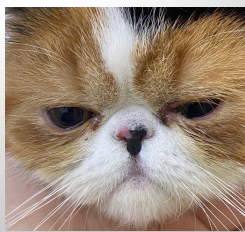
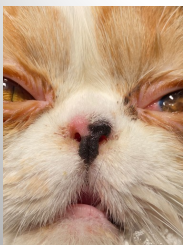
### Brachycephalic Dentistry

Don't forget about cats!



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### Brachycephalic Dentistry



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### Brachycephalic Dentistry

Idiopathic Gingival Hyperplasia



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## Brachycephalic Dentistry

### Idiopathic Gingival Hyperplasia



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## Brachycephalic Dentistry

### Supernumerary Teeth



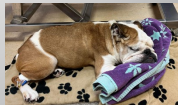
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## Brachycephalic Dentistry

### Anesthesia

Important factors to consider during management:

- **BOAS** – stenotic nares, hypoplastic trachea, elongated soft palate, laryngeal sacculles, small epiglottis, airway inflammation and edema secondary to negative airway pressure and subsequent turbulent airflow
- **Gastrointestinal disease** - esophagitis, gastroesophageal reflux, gastritis, and hiatal hernia, are prevalent in brachycephalic dogs with upper respiratory dysfunction
  - If there is a history, how is this being managed? Best to be done before surgery
    - Gastroprotectants, antacids, prokinetics
    - Could help to reduce risk of aspiration pneumonia
    - Perioperative management
- **Cardiovascular** – high vagal tone, awareness about upper airway/oral manipulation (surgery, intubation/extubation) can lead to increase episodes of bradycardia
- **Ocular considerations** - injuries



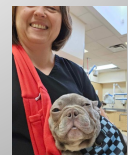
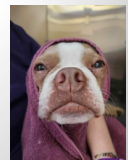
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## Brachycephalic Dentistry

### Anesthesia

#### GOALS:

- Maintain a stress-free induction and recovery
- Support tissue oxygen delivery throughout the entire anesthetic procedure
- Secure and maintain a patent airway
- Control vomiting/aspiration to prevent aspiration pneumonia
- Provide a pain-free recovery
- Appropriate dental-surgery time
- **MONITOR!**



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Thank you!

Questions?

