Common Malocclusions in the Dog & Cat: What Should I Do with Them?

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Malocclusions

- Normal
- Definition
- Classification
- Causes
- Treatment

What is normal?

Malocclusion = abnormal alignment of the teeth

- Discomfort and pain occur
  - Tooth-to-tooth contact
  - Tooth-to-soft tissue contact
- Disrupts cleansing mechanism of mouth
Malocclusion classification

• Individual teeth malpositioned
  = Neutroclusion (MAL/1)
    – Rotation
    – Crowding
    – Displacement

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    = MAL/3

MAL/2

MAL/3
Malocclusion classification

• Jaw discrepancy
  – Mandibular distoclusion
    = MAL/2
  – Mandibular mesioclusion
    = MAL/3
  – “Wry” bite
    = MAL/4

Causes of malocclusions

• Inherited
  – Genetic (breed)
  – Developmental (growth)

• Acquired
  – Trauma
    • Jaw fx
  – TMJ instability
  – Periodontal disease

Malocclusion Treatment

Goals
• Comfortable Mouth
• Healthy Mouth

Options
• Ball Therapy
• Soft tissue (+/- alveolar) contour
• Interceptive orthodontics
• Selective extractions
• Crown shortening and endodontic therapy
• Orthodontic movement

Causes: Inherited malocclusions

• Genetic = Breed predilection
  Dolicocephalic vs. Brachycephalic
• Developmental = Growth
  – Pediatric (4+ weeks)
  – Persistent retained deciduous teeth
  – Base narrow mandibular canine teeth
  – “Lance teeth”

Pediatric malocclusion

• Malocclusion seen in deciduous teeth
• Abnormal dental interlock
• Ideally treated 4-8 weeks of age

Malocclusion

If no masticatory interference or soft tissue trauma exists, and there is no periodontal involvement, then treatment is not needed.
Pediatric malocclusion

• Dental interlock interferes with further jaw growth
• Dental interlock due to:
  • Eruption of teeth during growth spurt
  • Jaw deformity

Deciduous dental interlock

Deciduous dental interlock

Tx = Interceptive orthodontics
• Removal of deciduous teeth in the shorter jaw, bilaterally
• Early relief allows for full genetic potential

Interceptive orthodontics

Persistent retained deciduous teeth

“No two same teeth in the mouth at the same time”
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- Eruption times of permanent teeth

Persistent retained deciduous teeth

→ Base narrow mandibular canines

Ball Therapy

Base narrow mandibular canines
Base narrow mandibular canines

Rostrally deviated maxillary canine “Lance teeth”

Want more?
References

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7. American Veterinary Dental College nomenclature images at www.avdc.org