

Denstistry review for BCSE

- **Terminology**

Peridontium: include the gum, the tooth root, cementum, the periodontal ligament and the alveolar bone of the jaw to which the ligaments attach.

Pulp: living tissue. Composed of odontoblasts and fibroblasts and is supplies by blood vessles, nerves and lymphatics.

Enamel: Living structure that provides a physical barrier against bacteria.

Dentin: provides a physical barrier against bacteria.

Sulcular fluid: flushes the sulcus with substances with antimicrobial functions.

Gingivitis: inflammation of gum.

Crown: above the gum line

Epulis: general term for gingival mass.

Canine ameloblastoma: most common benign oral tumor dogs, sometimes refered as epulis.

Wolf teeth: First premolars seen in the upper arcade of 20-60% of horses.

Tooth reabsorption: with time it will show the underling of the tooth.

Prognathism: mandible is longer than maxilla.

Bachygnathism: maxilla is longer than mandible.

Malocclusion: when the teeth is not properly aligned and wear in weird ways.

Buccal side: tooth that faces the cheek

Lingual side: tooth that faces the tongue

Labial surface: of the tooth is nearest to lips.

Gingival is the area of the tooth towards the gums.

- **Instruments**

Sonic dental scalers: NO heat build up. Do not used in the same spot for more than 5 seconds or it will damage the tooth and enamel.

Piezoelectric scalers: least traumatic, but builds up heat.

Magnetorestrictive:

Periodontal probe: is blunt and is used to gently measure the depth of gingival sulcus.

Scalers: have 2 parallel sharp sides, used for supragingival calculus removal.

Curette scaler: has on sharp side and is used for subgingival calculus removal.

Shepherd hook: has a sharp tip and is used to detect cavities and broken teeth.

Extraction forceps: best to remove teeth or heavy calculus.

- **Technique**

Parallel radiograph technique: is used for mandibular premolars and molar.

Occlusal radiograph technique is best to evaluate nasal disease and identifying tooth remnants.

Bisecting radiograph technique minimizes the image distortion that occurs because of an inability to place the x ray film parallel to the central axis of a tooth.

- **Physiology**

Gingival depth: normal depth of gingival sulcus in cats is 0.5-1mm and in dogs 1-3mm.

Fighting teeth: are the upper and lower canines present in llamas and alpacas. They should be ground down or removed upon eruption at 18-24 months.

Feline teeth: cats should have all 30 teeth by 7 months of age.

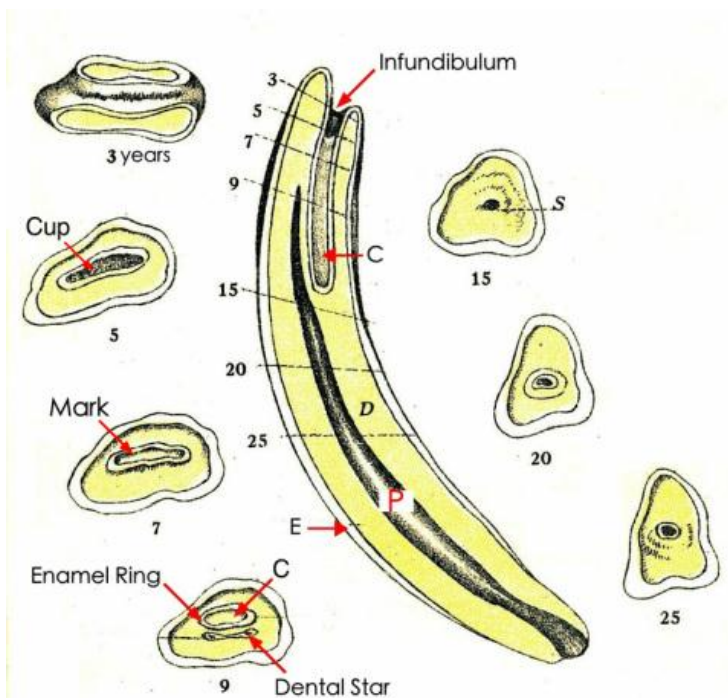
Dog teeth: dog should have all 42 teeth by 7 months of age.

Ruminant teeth: Ruminants should have all 32 teeth by 32 months of age.

Swine teeth: swine should have all 44 teeth by 20 months of age. **Needle teeth** is the piglets deciduous third incisors and canines that are sometimes removed after birth.

Horse teeth: horse should have all 36-44 teeth by 5 years of age. The tooth 109 (first molar) is the first to erupt between 9-12 months of age.

Sections "cut" parallel to numbered dashed lines show wear patterns of occlusal surfaces in terms of approximate horse age. Labels: E, enamel (white); D, primary dentin (yellow); I, infundibulum (funnel-shaped, enamel fold, or infolding, at top of incisor, mostly filled with cement (C); the part at the top is unfilled, or filled with food particles ("cup"), lower portion filled with cement (enamel ring and enclosed cement core referred to as the "mark"); in transverse cross section the wall of the infundibulum appears as an enamel ring, section 9; P, pulp cavity (filled with secondary dentin to protect nerves and blood vessels from exposure); S, dental star (transverse cross section of pulp cavity)



- **Pathologies**

Periodontal disease: approximately 80% of dogs and 70% of cats will have periodontal disease by 3 years of age. It is a general term that includes gingivitis and periodontitis.

Gingivitis: in cats gram-negative (mostly) and anaerobes play a significant role.

Retained deciduous tooth: remove soon as possible. Open approach if it is not loose or pull hard if it is loose.

Enamel hypoplasia is caused by trauma, systemic (fever, distemper), nutritional deficiencies (hypocalcemia), fluorosis, tetracyclines and hereditary (rare). In dogs is usually by distemper, in cattle by fluorosis.

Dental caries: uncommon in dogs and rare in cats.

Feline Odontoclastic resorptive lesions (FORL): also known as neck lesions

Sinusitis: usually do to tooth root infections.

Tooth abscessed: usually happens in upper fourth premolars in dogs.

Fluorosis is the major cause of bovine enamel hypoplasia.

