

# *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.

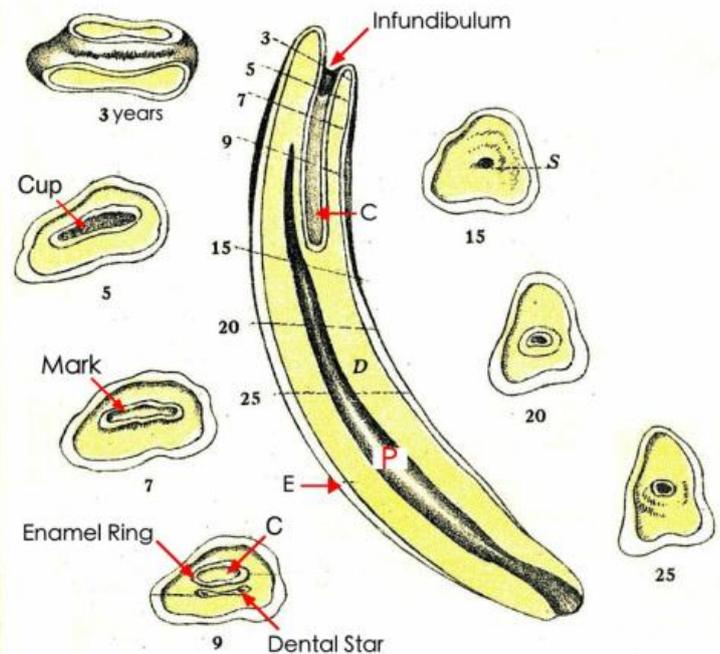
**Dog teeth:** dog should have all 42 teeth by 7 months of age Hello.

**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.

