Canine Pediatric Dentistry

Amy J. Fulton, DVM^{a,b}, Nadine Fiani, BVSc^C, Frank J.M. Verstraete, DrMedVet, MMedVet^{d,*}

KEYWORDS

- Canine pediatric dentistry
 Pedodontics
 Veterinary dentistry
 Dogs
- Deciduous dentition

KEY POINTS

- Every practitioner should be comfortable with normal dental anatomy in puppies and young adult dogs.
- The first puppy examination should include a comprehensive oral examination, with special attention paid to the orthodontic evaluation as well as evaluation of any developmental defects, including cleft lips and palates.
- Several developmental anomalies can affect the teeth, such as enamel hypoplasia, and persistent deciduous teeth that may or may not have a clinical impact on the dog.
- Deciduous teeth and immature adult teeth are prone to fracture and can rapidly result in endodontal disease.
- Certain tumor types can occur in young patients, and awareness is key in early recognition of these diseases.

The oral examination is an important part of the physical examination of every patient. In neonate and adolescent dogs, it is important to inspect the oral cavity for congenital and acquired dental and oral pathology. This article reviews the more common pediatric and juvenile dental anomalies that affect dogs in order to provide a resource for the basic understanding of the oral cavity in these patients.

NORMAL DECIDUOUS DENTITION

The first puppy examination typically occurs at approximately 8 weeks of age. At this age, the deciduous dentition should be fully erupted (**Table 1**).^{1,2} Each quadrant should have 3 deciduous incisor, 1 deciduous canine, and 3 deciduous premolar

* Corresponding author.

E-mail address: fjverstraete@ucdavis.edu

Vet Clin Small Anim 44 (2014) 303–324 http://dx.doi.org/10.1016/j.cvsm.2013.11.004 0195-5616/14/\$ – see front matter © 2014 Elsevier Inc. All rights reserved.

vetsmall.theclinics.com

The authors have no financial disclosures to acknowledge.

^a Dentistry and Oral Surgery Service, William R. Pritchard Veterinary Medical Teaching Hospital Small Animal Clinic, School of Veterinary Medicine, University of California-Davis, One Shields Avenue, Davis, CA 95616, USA; ^b Cordova Veterinary Hospital, 2939 Mather Field Road, Rancho Cordova, CA 95670, USA; ^c Small Animal Specialist Hospital, 1 Richardson Place, North Ryde, New South Wales, Sydney 2113, Australia; ^d Department of Surgical and Radiological Sciences, School of Veterinary Medicine, University of California-Davis, One Shields Avenue, Davis, CA 95616, USA

Table 1 Eruption times for teeth in dogs		
	Deciduous Eruption Times (wk)	Permanent Eruption Times (mo)
Incisor teeth	3–4	3–4
Canine teeth	3	3–4
Premolar teeth	4–12	4–6
Molar teeth	N/A	5–7

teeth. There are no deciduous precursors of the first premolar or of the molar teeth. In respect to appearance, the incisor and canine teeth are smaller, slimmer, and sharper than their permanent successors, and the deciduous premolar teeth appear as diminuity versions of the permanent teeth that erupt behind them. For instance, the deciduous fourth premolar tooth looks like a smaller version of the permanent first molar tooth (**Fig. 1**).^{1,3} The roots of deciduous premolar teeth also tend to diverge compared with their permanent successor.

At approximately 12 weeks of age, it is possible to see mixed dentition present, where both permanent and deciduous teeth have erupted (see **Table 1**).^{1,3} If a deciduous tooth is congenitally absent, then the successional permanent tooth will also be absent, a point that is easy to confirm with a dental radiograph.¹ Teeth can be named by their anatomic location. Alternatively, dental numbering systems, such as the triadan system,⁴ have frequently been used in veterinary medicine to give each tooth a 3-digit number, where each tooth is numbered first by quadrant, then anatomy. For example, the right maxilla, in the 100-quadrant, results in the maxillary right canine tooth labeled as 104. The left maxilla represents the 200-quadrant, the left mandible the 300-quadrant, and the right mandible the 400-quadrant. The deciduous teeth then follow suit, labeled as 500, 600, 700, or 800 for the right maxilla, left maxilla, left mandible, negretively.^{4,5}

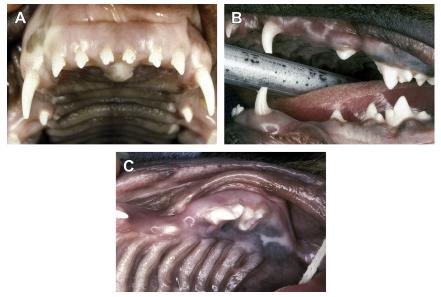


Fig. 1. Normal deciduous dentition in a 2-month-old dog: (*A*) maxillary incisor and canine teeth; (*B*) mandibular and maxillary canine and premolar teeth; (*C*) maxillary premolar teeth.

Download English Version:

https://daneshyari.com/en/article/2460416

Download Persian Version:

https://daneshyari.com/article/2460416

Daneshyari.com