

VDOS Clinical Rounds/Journal Clubs (Dental Diagnostic Imaging)

Publications discussed on November 13, 2023

Anatomy

- Gracis M, Harvey CE. Radiographic study of the maxillary canine tooth in mesaticephalic dogs. *Journal of Veterinary Dentistry* 1998; 15 (2): 73-78.
- Gracis M. Radiographic study of the maxillary canine tooth of four mesaticephalic cats. *Journal of Veterinary Dentistry* 1999; 16: 115-128.
- Ilić DV, Stojanović L. Application of digital radiography for measuring in clinical dental practice. *Srpski Arhiv Za Celokupno Lekarstvo* 2015; 143 (1-2): 16-22.
- Soukup JW, Drees R, Koenig LJ, Snyder CJ, Hetzel S, Miles CR, Schwarz T. Comparison of the diagnostic image quality of the canine maxillary dentoalveolar structures obtained by cone beam computed tomography and 64-multidetector row computed tomography. *Journal of Veterinary Dentistry* 2015; 32: 80-86.
- Santos M, Carreira LM. Mathematical equation for prediction of cat mandibular canal height dimension based on canine tooth width measurement. *Journal of Feline Medicine and Surgery* 2016; 18: 452-456.
- Marron L, Rawlinson J, McGilvray K, Prytherch B. Comparison of micro-computed tomography and digital intraoral radiography to determine the accuracy of digital radiographic measurements of mandibular molar teeth in dogs. *Journal of Veterinary Dentistry* 2017; 34: 248-258.
- Döring S, Arzi B, Barich CR, Hatcher DC, Kass PH, Verstraete FJM. Evaluation of the diagnostic yield of dental radiography and cone-beam computed tomography for the identification of anatomic landmarks in small to medium-sized brachycephalic dogs. *American Journal of Veterinary Research* 2018; 79: 54-61.
- Döring S, Arzi B, Hatcher DC, Kass PH, Verstraete FJM. Evaluation of the diagnostic yield of dental radiography and cone-beam computed tomography for the identification of dental disorders in small to medium-sized brachycephalic dogs. *American Journal of Veterinary Research* 2018; 79: 62-72.
- Lee S, Lee K, Kim H, An J, Han J, Lee T, Jeong H, Cho Y. Comparison of dental radiography and computed tomography: measurement of dentoalveolar structures in healthy, small-sized dogs and cats. *Journal of Veterinary Science* 2020 Sep;21(5):e75. doi: 10.4142/jvs.2020.21.e75.
- Ruhнау J. A trans-orbital projection for radiological evaluation of the maxillary first molar tooth in dogs. *Journal of Veterinary Dentistry* 2023; 40: 204-211.

Age Estimation

- Wilson G. Timing of apical closure of the maxillary canine and mandibular first molar teeth of cats. *Journal of Veterinary Dentistry* 1999; 16 (1): 19-21.
- Park K, Ahn J, Kang S, Lee E, Kim S, Park S, Park S, Noh H, Seo K. Determining the age of cats by pulp cavity/tooth width ratio using dental radiography. *Journal of Veterinary Science* 2014; 15: 557-561.

- Van den Broeck M, Stock E, Vermeiren Y, Verhaert L, Duchateau L, Cornillie P. Age estimation in young dogs by radiographic assessment of the canine pulp cavity/tooth width ratio. *Anatomia Histologia Embryologia* 2022; 51: 269-279.

Periodontal Disease

- Hamp SE, Hamp M, Olsson SE, Lindberg R, Schauman P. Radiography of spontaneous periodontitis in dogs. *Journal of Periodontal Research* 1997; 32: 589-597.
- Verstraete FJ, Kass PH, Terpak CH. Diagnostic value of full-mouth radiography in dogs. *American Journal of Veterinary Research* 1998; 59: 686-691.
- Verstraete FJ, Kass PH, Terpak CH. Diagnostic value of full-mouth radiography in cats. *American Journal of Veterinary Research* 1998; 59: 692-695.
- Lommer MJ, Verstraete FJ. Radiographic patterns of periodontitis in cats: 147 cases (1998-1999). *Journal of the American Veterinary Medical Association* 2001; 218: 230-234.
- Tsugawa AJ, Verstraete FJ, Kass PH, Görrel C. Diagnostic value of the use of lateral and occlusal radiographic views in comparison with periodontal probing for the assessment of periodontal attachment of the canine teeth in dogs. *American Journal of Veterinary Research* 2003; 64: 255-261.
- Roza MR, Silva LA, Barriviera M, Januario AL, Bezerra AC, Fioravanti MC. Cone beam computed tomography and intraoral radiography for diagnosis of dental abnormalities in dogs and cats. *Journal of Veterinary Science* 2011; 12: 387-392.
- Kim CG, Lee SY, Kim JW, Park HM. Assessment of dental abnormalities by full-mouth radiography in small breed dogs. *Journal of the American Animal Hospital Association* 2013; 49: 23-30.
- Moore JI, Niemiec B. Evaluation of extraction sites for evidence of retained tooth roots and periapical pathology. *Journal of the American Animal Hospital Association* 2014; 50: 77-82.
- Campbell RD, Peralta S, Fiani N, Scrivani PV. Comparing intraoral radiography and computed tomography for detecting radiographic signs of periodontitis and endodontic disease in dogs: An agreement study. *Frontiers in Veterinary Science* 2016 Aug 31;3:68. doi: 10.3389/fvets.2016.00068.
- Heney CM, Arzi B, Kass PH, Hatcher DC, Verstraete FJM. Diagnostic yield of dental radiography and cone-beam computed tomography for the identification of anatomic structures in cats. *Frontiers in Veterinary Science* 2019 Feb 28;6:58. doi: 10.3389/fvets.2019.00058.
- Heney CM, Arzi B, Kass PH, Hatcher DC, Verstraete FJM. The diagnostic yield of dental radiography and cone-beam computed tomography for the identification of dentoalveolar lesions in cats. *Frontiers in Veterinary Science* 2019 Feb 21;6:42. doi: 10.3389/fvets.2019.00042.
- Song D, Shujaat S, de Faria Vasconcelos K, et al. Diagnostic accuracy of CBCT versus intraoral imaging for assessment of peri-implant bone defects. *BMC Medical Imaging* 2021 Feb 10;21(1):23. doi: 10.1186/s12880-021-00557-9.

Endodontic Disease

- Niemiec BA. Assessment of vital pulp therapy (VPT) for nine complicated crown fractures and fifty-four crown reductions in dogs and cats. *Journal of Veterinary Dentistry* 2001; 18: 122-125.

- Clarke DE. Vital pulp therapy for complicated crown fracture of permanent canine teeth in dogs: A three-year retrospective study. *Journal of Veterinary Dentistry* 2001; 18: 117-121.
- Hale F. Localized intrinsic staining of teeth due to pulpitis and pulp necrosis in dogs. *Journal of Veterinary Dentistry* 2001; 18: 14-20.
- Kuntsi-Vaattovaara H, Verstraete FJM, Kaas PH. Results of root canal treatment in dogs: 127 cases (1995-2000). *Journal of the American Veterinary Medical Association* 2002; 220: 775-780.
- Holland R, Otoboni Filho JA, de Souza V, et al. A comparison of one versus two appointment endodontic therapy in dogs' teeth with apical periodontitis. *Journal of Endodontics* 2003; 29: 121-124.
- Sabeti MA, Nekofar M, Motahhary P, et al. Healing of apical periodontitis after endodontic treatment with and without obturation in dogs. *Journal of Endodontics* 2006; 32: 628-633.
- Hasheminia SM, Feizi G, Razavi SM et al. Histologic evaluation of three treatment methods for direct pulp capping of cat's dentine. *International Endodontic Journal* 2007; 2: 54-60.
- Jorge EG, Tanomaru-Filho M, Gonçalves M, et al. Detection of periapical lesion development by conventional radiography or computed tomography. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics* 2008; 106: e56-61.
- Garcia de Paula-Silva FW, Wu MK, Leonardo MR, da Silva LA, Wesselink PR. Accuracy of periapical radiography and cone-beam computed tomography scans in diagnosing apical periodontitis using histopathological findings as a gold standard. *Journal of Endodontics* 2009; 35: 1009-1012.
- Garcia de Paula-Silva FW, Santamaria M Jr, Leonardo MR, et al. Cone-beam computerized tomographic, radiographic, and histologic evaluation of periapical repair in dogs' post-endodontic treatment. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics* 2009; 108: 796-805.
- Garcia de Paula-Silva FW, Hassan B, Bezerra da Silva LA, Leonardo MR, Wu MK. Outcome of root canal treatment in dogs determined by periapical radiography and cone-beam computed tomography scans. *Journal of Endodontics* 2009; 35: 723-726.
- Ordinola-Zapata R, Bramante CM, Duarte MH, et al. The influence of cone-beam computed tomography and periapical radiographic evaluation on the assessment of periapical bone destruction in dog's teeth. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics* 2011; 112: 272-279.
- Fulton AJ, Arzi B, Lommer MJ et al. Outcome of surgical endodontic treatment in dogs: 15 cases (1995-2011). *Journal of the American Veterinary Medical Association* 2012; 241: 1633-1638.
- López FU, Kopper PM, Cucco C, Della Bona A, de Figueiredo JA, Vier-Pelisser FV. Accuracy of cone-beam computed tomography and periapical radiography in apical periodontitis diagnosis. *Journal of Endodontics* 2014; 40: 2057-2060.
- Luotonen N, Kuntsi-Vaattovaara H, Sarkiala-Kessel E, et al. Vital pulp therapy in dogs: 190 cases (2001-2011). *Journal of the American Veterinary Medical Association* 2014; 244: 449-459.
- Menzies RA, Reiter AM, Lewis JR. Assessment of apical periodontitis in dogs and humans: a review. *Journal of Veterinary Dentistry* 2014; 31: 8-21.

- Kobayashi-Velasco S, Salineiro FC, Gialain IO, Cavalcanti MG. Diagnosis of alveolar and root fractures: an in vitro study comparing CBCT imaging with periapical radiographs. *Journal of Applied Oral Science* 2017; 25: 227-233.
- Kobayashi-Velasco S, Salineiro FCS, Gialain IO, Cavalcanti MGP. Diagnosis of alveolar and root fractures in macerated canine maxillae: a comparison between two different CBCT protocols. *Dentomaxillofacial Radiology* 2017 Aug;46(6):20170037. doi: 10.1259/dmfr.20170037.
- Strom PC, Arzi B, Lommer MJ et al. Radiographic outcome of root canal treatment of canine teeth in cats: 32 cases (1998-2016). *Journal of the American Veterinary Medical Association* 2018; 252: 572-580.
- Ng KK, Rine S, Choi E, Fiani N, Porter I, Fink L, Peralta S. Mandibular carnassial tooth malformations in 6 dogs - Micro-computed tomography and histology findings. *Frontiers in Veterinary Science* 2019 Dec 17;6:464. doi: 10.3389/fvets.2019.00464.
- Zaen El-Din A, Hamama HH, Abo El-Elaa MA, et al. The effect of four materials on direct pulp capping: An animal study. *Australian Endodontic Journal* 2020; doi: 10.1111/aej.12400.
- Goodman AE, Niemiec BA, Carmichael DT, Thilenius S, Lamb KE, Tozer E. The incidence of radiographic lesions of endodontic origin associated with uncomplicated crown fractures of the maxillary fourth premolar in canine patients. *Journal of Veterinary Dentistry* 2020; 37: 71-76.
- Thorne S, Johnston N, Adams VJ. Successful use of MTA Fillapex as a sealant for feline root canal therapy of 50 canines in 37 cats. *Journal of Veterinary Dentistry* 2020; 37: 77-87.
- Huamán SD, Brito Aragão MG, Dias Moreno AP, Mussolino de Queiroz A, Bezerra da Silva RA, Garcia de Paula-Silva FW, Bezerra da Silva LA. Accuracy of conventional periapical radiography in diagnosing furcation repair after perforation treatment. *Journal of Endodontics* 2020; 46: 827-831.
- Feigin K, Bell C, Shope B, Henzel S, Snyder C. Analysis and assessment of pulp vitality of 102 intrinsically stained teeth in dogs. *Journal of Veterinary Dentistry* 2022; 39: 21-33.
- Lee DB, Arzi B, Kass PH, Verstraete FJM. Radiographic outcome of root canal treatment in dogs: 281 teeth in 204 dogs (2001-2018). *Journal of American Veterinary Medical Association* 2022; 260: 535-542.
- Adrian AI, Balke M, Lynch R, Fink L. Radiographic outcome of the endodontic treatment of 55 fractured canine teeth in 43 dogs (2013-2018). *Journal of Veterinary Dentistry* 2022; 39: 250-256.

Tooth Resorption

- Lommer MJ, Verstraete FJ. Prevalence of odontoclastic resorption lesions and periapical radiographic lucencies in cats: 265 cases (1995-1998). *Journal of the American Veterinary Medical Association* 2000; 217: 1866-1869.
- Harvey CE, Orsini P, McLahan C, Schuster C. Mapping of the radiographic central point of feline dental resorptive lesions. *Journal of Veterinary Dentistry* 2004; 21: 15-21.
- Heaton M, Wilkinson J, Gorrel C, Butterwick R. A rapid screening technique for feline odontoclastic resorptive lesions. *Journal of Small Animal Practice* 2004; 45: 598-601.
- Girard N, Servet E, Biourge V, Hennet P. Feline tooth resorption in a colony of 109 cats. *Journal of Veterinary Dentistry* 2008; 25: 166-174.

- Girard N, Servet E, Biourge V, Hennet P. Periodontal health status in a colony of 109 cats. *Journal of Veterinary Dentistry* 2009; 26: 147-155.
- Farcas N, Lommer MJ, Kass PH, Verstraete FJ. Dental radiographic findings in cats with chronic gingivostomatitis (2002-2012). *Journal of the American Veterinary Medical Association* 2014; 244: 339-345.
- Lang LG, Wilkinson TE, White TL, Farnsworth RK, Potter KA. Computed tomography of tooth resorption in cats. *Veterinary Radiology and Ultrasound* 2016; 57: 467-474.