Results: There are no current applicable results for this research presentation.

Discussion: The diagnosis and staging of MRONJ is currently based on patient history and clinical findings. Panoramic and intraoral radiographs help make an overall assessment. However, the presence or extent of necrotic changes may be underestimated on panoramic radiographs, complicating differentiation of MRONJ from dental disease. Although cone beam computed tomography (CBCT) provides improved visualization of the MRONJ lesion, criteria to identify patients who would benefit from this modality are lacking. Certain radiographic parameters seen in stage 0 MRONJ may predict progression to clinical bone exposure. Thus, imaging findings play an important role in evaluating the extent of disease, facilitating staging, and determining subsequent management. This report provides a review of the literature pertaining to the value of CBCT imaging in MRONJ management. Guided by these data, we propose an imaging protocol to facilitate clinical decision making and appropriate application of CBCT imaging.

DOUBLE CONTOUR SIGN IN TEMPORO-MANDIBULAR JOINTS IN CONE BEAM COMPUTED TOMOGRAPHY: A CASE

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Clinical Presentation: A double contour of the cortical border in the temporomandibular joints (TMJs) is a rare sign that can be seen in the mandibular condyles and/or in the glenoid cavity. This sign can be attributed to several causes and may have different clinical manifestations and management.

Differential Diagnosis: Subcortical erosion, incipient formation of subchondral cysts, and crescent sign were considered. Movement artifacts may sometimes create a false-positive sign.

Diagnosis and Management: Double contour of the TMJs can be better visualized on *cone beam computed tomography*. Because it is a nonspecific sign, it must be correlated with a complete medical history to be linked to a specific diagnosis.

Discussion: Double contour of the components of the TMJs can represent a sign of active pathosis and be a sign of bone remodeling in asymptomatic patients. Magnetic resonance imaging and clinical studies have shown a strong correlation between double contour and disk dislocation. It is important that the radiologist identify this sign and its clinical significance, with the purpose of helping the clinician in diagnosis and management.

References"

- 1. Tamimi D, Hatcher DC. Specialty Imaging: Temporomandibular Joint. Salt Lake City, UT: Elsevier; 2016.
- Liu MQ, Chen HM, Yap AUJ, Fu KY. Condylar remodeling accompanying splint therapy: a cone-beam computerized tomography study of patients with temporomandibular joint disk displacement. Oral Surg Oral Med Oral Pathol Oral Radiol. 2012;114:259-265.
- Yano K, Nishikawa K, Sano T, Okano T. Relationship between appearance of a double contour on the mandibular condyle and the change in articular disc position after splint therapy. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009;108:e30e34.

RETROPHARYNGEAL INTERNAL CAROTID ARTERY: A REVIEW OF 3 CASES *M. BRINER,*

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Introduction: The internal carotid artery (ICA) can take multiple pathways as it extends from the carotid bifurcation to the skull base. An aberration of its normal pathway may place the ICA in a retropharyngeal position in close proximity to the posterior pharyngeal wall.¹⁻³ Radiographic classification is based on its proximity to the pharynx and/or pathway.^{1,4,5} We present a series of 3 cases of retropharyngeal ICAs with the goal of reporting and classifying these variations.

Case Presentation: Case 1: Retropharyngeal right ICA. Minimum distance to the pharyngeal wall was approximately 4.9 mm (high risk of vascular injury) with a tortuous pathway.

Case 2: Bilateral retropharyngeal ICA. ICAs were in contact with the posterior pharyngeal wall (very high risk of vascular injury). The left had a kinking pathway, and the right was tortuous. Case 3: Bilateral retropharyngeal ICA. Minimum distances of the right and left ICAs to the posterior pharyngeal wall were approximately 3.5 mm and 3.3 mm, respectively (high risk of vascular injury). The right had a kinking pathway and the left was tortuous.

Discussion: Closeness of the vessel to the retropharyngeal wall increases the risk of surgical and nonsurgical complications.^{1,6} It is worth noting that the position of the artery is not constant and can change in position over time.⁷ It is important for oral and maxillofacial radiologists to have knowledge of the anatomy and variations of the ICA. This enables clinicians to take necessary precautions to reduce complications if performing any procedure in the region.

References

- Paulsen F, Tillman B, Christofides C, Richter W, Koebke J. Curving and looping of the internal carotid artery in relation to the pharynx: frequency, embryology and clinical implications. J Anat. 2000;197:373-381.
- Wasserman JM, Sclafani SJA, Goldstein NA. Intraoperative evaluation of a pulsatile oropharyngeal mass during adenotonsillectomy. Int J Pediatr Otorhinolaryngol. 2006;70:371-375.
- Kay MD, Mehta V, Goldsmith AJ. Perioperative adenotonsillectomy management in children: current practices. Laryngoscope. 2003;113:592-598.
- 4. Prakash M, Abhinaya S, Kumar A, Khandelwal N. Bilateral retropharyngeal internal carotid artery: arare and potentially fatal anatomic variation. Neurol India. 2017;65:431-432.
- Dungan DH, Heiserman JE. The carotid artery embryology, normal anatomy and physiology. Neuroimaging Clin North Am 1996;6:789-799.
- Am. 1996;6:789-799.
 Avitia, S, Hamilton J, OsborneRF. Retropharyngeal carotid artery. ENT. 2007;86:665.
- Lukins DE, Pilati S, Escott EJ. The moving carotid artery: aretrospective review of the retropharyngeal carotid artery and the incidence of positional changes on serial studies. Am J Neuroradiol. 2016;37:336-341.

QUALITY ASSURANCE IN DIGITAL IMAG-ING: IT REALLY DOES MATTER A.K. BUCHANAN, S.M. KALATHINGAL, and R