

- 4 Muñoz G, Olate S, Cantín M, Vásquez B, Del Sol M. TMJ in facial class III deformity. Condylar morphology relations. *Int J Clin Exp Med*. 2014;7:3113-3117.
- 5 Su N, Liu Y, Yang X, Luo Z, Shi Z. Correlation between bony changes measured with cone beam computed tomography and clinical dysfunction index in patients with temporomandibular joint osteoarthritis. *J Craniomaxillofac Surg*. 2014;42:1402-1407.

GLANDULAR ODONTOGENIC CYST MIMICKING AMELOBLASTOMA IN A 78-YEAR-OLD FEMALE: A CASE REPORT. B.D. LEE, W.

LEE, K.H. KWON, M.K. CHOI, E.J. CHOI, J.H. YOON. WONKWANG UNIVERSITY, NORTH JEOLLA PROVINCE, KOREA

Background: Glandular odontogenic cysts (GOCs) may show radiologically similar findings with ameloblastoma. It is also interesting to explore the growth pattern of GOCs in elderly patients.

Objective(s): The aim of this report was to describe a case of GOC with characteristic radiographic jaw features.

Study Design: A cystic lesion in the posterior mandible of a 78-year-old female was incidentally found. Periodic radiographs showed a unilocular lesion with a scalloped margin, external root resorption of the adjacent tooth, and cortical perforation. This lesion had changed from a small ovoid lesion to a more expanded lesion in a period of 4 years. The small lesion showed unilocularity with a smooth margin and a well-defined border, but the expanded lesion produced cortical perforation and a lobulated margin. The biopsy was done for final diagnosis.

Results: The radiographic diagnosis was an ameloblastoma, whereas the histopathologic examination revealed a GOC.

Discussion/Conclusions: This case shows that a GOC can arise in people in their 70s, changing from a unilocular lesion to an expanded, lobulated lesion over a period. Periodic radiographs showed the changes in the lesion shape and the lobular margin that took place during a period of 4 years. Furthermore, it is a rare case in that the above-mentioned radiographic changes were observed in the posterior mandible of an elderly woman.

Acknowledgments

We express our gratitude to Prof. R. Karaca, Gazi University, for wonderful discussion about the radiographic features of GOC.

References

- 1 Hussain K, Edmondson HD, Browne RM. Glandular odontogenic cysts. Diagnosis and treatment. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 1995;79:593-602.
- 2 Kaplan I, Anavi Y, Hirshberg A. Glandular odontogenic cyst: a challenge in diagnosis and treatment. *Oral Dis*. 2008;14:575-581.
- 3 Macdonald-Jankowski DS. Glandular odontogenic cyst: systematic review. *Dentomaxillofac Radiol*. 2010;39:127-139.
- 4 Manor R, Anavi Y, Kaplan I, Calderon S. Radiological features of glandular odontogenic cyst. *Dentomaxillofac Radiol*. 2003;32:73-79.
- 5 Tambawala SS, Karjodkar FR, Yadav A, Sansare K, Sontakke S. Glandular odontogenic cyst: a case report. *Imaging Sci Dent*. 2014;44:75-79.

HIGH CONTRAST RADIOGRAPHS: AN UNUSUAL DIAGNOSTIC QUALITY ASSURANCE PROBLEM. A. BUCHANAN, S. KALATHINGAL, A. ORTA. DENTAL COLLEGE OF GEORGIA, AUGUSTA UNIVERSITY, AUGUSTA, GA

Background: The importance of quality assurance (QA) measures in digital imaging has been recognized, and as a result, the American Dental Association (ADA) appointed a task force of experts to compose guidelines for intraoral imaging. Although many groups are working to establish better resources for QA measures, continued research is necessary in order to keep these resources up to date. Therefore, it is essential and critical to report on digital QA issues.

Objective(s): The aim of this study was to describe an unusual diagnostic quality problem encountered when acquiring bitewings of all zirconia crowns on photostimulable phosphor (PSP) plates.

Study Design: All zirconia crowns, using a modified cutback design, were imaged with DIGORA Optime PSP plates (Soredex/Orion Corp., Helsinki, Finland) and a Kodak RVG 6100 size 2 sensor (Carestream Dental, Atlanta, GA). The same Planmeca Intra direct current X-ray unit (Planmeca Oy, Helsinki, Finland) was used to acquire all images. The consistency of the exposure output was verified using the Piranha 557 meter (RTI Electronics, Mölndal, Sweden).

Results: Radiographic projections containing predominantly all-zirconia crowns (i.e., bitewings) resulted in undiagnostic high-contrast images when using DIGORA Optime PSP plates. When the same technique was employed using a direct digital sensor (Kodak RVG 6100), the problem did not occur.

Discussion/Conclusions: Radiographic projections containing predominantly all-zirconia crowns (i.e., bitewings) result in undiagnostic high-contrast images when using DIGORA Optime PSP plates. The poor contrast appeared to have been caused by an inherent inability of the PSP plate imaging system to form an image effectively when the majority of the radiograph contains all-zirconia crowns. It must be noted that these findings can only be applied to the PSP plate imaging system evaluated in this study.

Acknowledgments

The authors would like to acknowledge Dr. Amy Orta for the contribution of this case.

Reference

- 1 ADA Technical Report No. 1094: Quality Assurance for Digital Intra-Oral Radiographic Systems. In: The ADA Standards Committee on Dental Informatics (SCDI), Chicago, IL: ADA; 2017:1-12.

INFLUENCE OF THE MEDICAL AND DENTAL HISTORY ON THE RADIOGRAPHIC INTERPRETATION. S. PALACIOS, K. GAINES, M. ALMAHNDR, D. KASHTWARI, L. BEHAR-HORENSTEIN. UNIVERSITY OF FLORIDA, GAINESVILLE, FL

Background: Medical history can have a positive influence on a radiologists' interpretations, leading to a more useful report for the clinician. However, the medical history should not dictate the radiologic interpretation. We conducted a pilot study