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

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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.

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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

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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

among the dentists practicing at the University of Florida to observe the influence of the patients' medical and dental histories on the differential radiologic interpretation.

Objective(s): The aim of this study was to observe the influence of the medical and dental histories on radiologic interpretation, and the variation depending on the dental specialty and the dentist's years of experience; and to encourage the dental practitioner to follow a systematic diagnostic strategy to avoid bias caused by the patient's medical and dental histories during radiologic interpretation.

Study Design: Dentists practicing at the University of Florida College of Dentistry were randomly divided into 4 equal groups of equal number. A survey email was sent to these groups, containing a case presentation with a pantomograph, intraoral photographs, and a medical history. The medical history was intentionally changed in each group to observe if this influenced the answers chosen by the dentists.

Results: A percentile-based descriptive analysis and a χ^2 analysis demonstrated that the majority of the participating dentists were biased by the medical and dental histories provided. A correlation analysis revealed a weak relationship between the answers chosen by the participating dentists and their dental specialty and years of experience.

Discussion/Conclusions: Knowledge of oral and maxillofacial radiology and accurate medical and dental histories are indispensable for an appropriate radiologic interpretation. However, to avoid bias from the medical and dental histories during radiologic interpretation, the dentist should strategically do the radiologic interpretation first, correlate with clinical findings, come up with potential differential interpretations, and finally correlate the medical history with the interpretation to establish the final diagnosis.

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INTRAOSSEOUS LIPOMA OF THE MANDIBLE. S.C. LIN, H.H. SUN, C.M. PARK. HIGHLAND HOSPITAL, UNIVERSITY OF THE PACIFIC, SAN FRANCISCO, CA

Background: Intraosseous lipoma (IL) is an uncommon, benign lesion of the bones, making up approximately 0.1% of all primary osseous tumors. Presentation within the jaws remains particularly rare, with no more than 20 cases of mandibular intraosseous lipoma (MIL) documented within the English language literature. Its presentation is often mistaken for other entities,

such as anterior Stafne bone defect, traumatic bone cavity, keratocystic odontogenic tumor, adenomatoid odontogenic tumor, and glandular odontogenic cyst. MIL has been documented with variable signs and symptoms and locations, but manifestations in the anterior mandible are especially uncommon.

Discussion/Conclusions: A 33-year-old Hispanic female presented with an incidental finding of a well-defined, intraosseous unilocular radiolucent lesion in the right anterior mandible that was not visible on previous radiographs. The lesion measured 30 × 20 mm, without cortical expansion, and was located apical to teeth #25, #26, and #27, which were asymptomatic. The lesion was enucleated, and the specimen was histologically confirmed to be MIL.

This uncommon case of MIL has helped to better describe the features of this rare entity. The medial border of this lesion closely approximated the symphyseal midline, even when the lesion approaches the anterior mandible in only about 20% of described cases. The lesion also presented in the fourth decade of life, below the typical age of the fifth and sixth decades. Features of the current case have not been previously reported, given the small number of cases documented in the literature. Although MIL has a mild behavior and does not require aggressive surgical management, this case illustrates that it may mimic other diseases, given its location in the anterior mandible in a younger patient, thus hindering an accurate diagnosis.

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KENNY-CAFFEY SYNDROME: A CASE REPORT AND A REVIEW OF THE LITERATURE. J. BUKHARI, M. MAHDIAN, D. COLOSI. STONY BROOK SCHOOL OF DENTAL MEDICINE, STONY BROOK, NY

Background: Kenny-Caffey syndrome (KCS) is a rare inherited disorder, with only 65 cases reported between 1966 and 2012, almost exclusively in Middle Eastern populations. The syndrome is characterized by a multitude of signs and symptoms, including severe growth retardation, hypocalcemia associated with hypoparathyroidism, skeletal and facial deformities, thickened cortices of long bones, and medullary stenosis. In addition to skeletal and endocrine abnormalities, dental and maxillofacial anomalies are common in KCS, with features including, but not limited to, micrognathia, generalized hypodontia, delayed eruption, dental caries, and gingivitis. Management of patients presenting with this syndrome requires a multidisciplinary approach from medical and dental personnel.

Discussion/Conclusions: We report a case of a 32-year-old female who presented to Stony Brook School of Dental Medicine for screening, with a request for implants. Panoramic radiography revealed numerous features, including hypodontia,