

**ATYPICAL RADIOGRAPHIC PRESENTATION OF OSSIFYING FIBROMA.** S. VIJAYAN, J. ORGILL, S. STEWART-THARP, N. HANDOO, V. ALLAREDDY. UNIVERSITY OF IOWA COLLEGE OF DENTISTRY, IOWA CITY, IA

**Background:** *History:* A 21-year-old female presented with a 1-year history of pain in the mandibular right premolar region. *Radiographic findings:* The multidetector computed tomography (MDCT) images showed a 5 × 1.7 cm radiolucent lesion of the mandible extending from the left canine, across the midline, to the right second molar. There was thinning of the buccal and lingual cortices, with displacement of the buccal cortex. There was evidence of thin trabeculae in the buccal cortical area. There was displacement of the first and second premolars in the region, with evidence of resorption of the roots of the incisors and right first and second molars. The inferior alveolar canal was not visualized within the region of the lesion, and it was difficult to determine if there was displacement or destruction of the canal. *Differential Interpretation:* The differential interpretation included giant cell lesion, ameloblastoma, odontogenic keratocyst, and odontogenic myxoma. *Microscopic Description:* Microscopic examination revealed multiple, small, round to ovoid islands of demineralized osteoid and acellular basophilic material, scattered amidst a dense fibrocollagenous connective tissue, populated with bland, occasionally stellate, fibroblasts.

**Discussion/Conclusions:** The lesion was diagnosed as benign fibro-osseous lesion consistent with a cemento-ossifying fibroma. The MDCT images provided a challenging interpretation in this case. On the basis of the images, the more obvious diagnosis was toward a benign cyst or tumor, such as a giant cell lesion, with differential diagnoses of ameloblastoma, odontogenic keratocyst, or odontogenic myxoma. However, we should not rule out aggressive ossifying fibromas among the differential diagnoses as this case clearly proves with such typical features.

**References**

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**CAROTID ARTERY CALCIFICATIONS DETECTED BY CBCT IN PATIENTS WITH A HISTORY OF HYPERTENSION.** J. BUKHARI, M. MAHDIAN, D. COLOSI. STONY BROOK SCHOOL OF DENTAL MEDICINE, STONY BROOK, NY

**Background:** One of the most common sites for the formation of vascular calcifications is in the branches of the common carotid artery. More frequently, these are formed by the calcification of existing plaques along the vascular wall. Numerous studies utilizing other modalities have revealed a positive correlation between vascular calcifications and hypertension; however, there is a need for investigation of the incidence of these pathologies using cone beam computed tomography

(CBCT) technology and for exploring the factors that influence their presence or detection.

**Objective(s):** The aim of this study was to determine the proportion of patients who have a positive history of hypertension and a positive finding of carotid artery calcification (CAC) and to determine if there are factors that predispose certain groups of patients to carotid artery calcifications, including patient age, gender, and history of antihypertensive medication use.

**Study Design:** This retrospective study focused on 608 randomly selected patients who received dental CBCT imaging studies at Stony Brook School of Dental Medicine. Relevant patient demographic characteristics and medical history were extrapolated from the patients' electronic health records. The data were analyzed for statistical significance using Pearson's correlation and logistic regression.

**Results:** A total of 608 patient records (mean age = 62.6 years) with equal gender distribution were screened. Of these, 108 (17.76%) cases showed an incidence of CAC. 240 records indicated a positive history of hypertension (HTN), and 87 patient records (36.25%) showed a positive history of HTN and presence of carotid calcification. A strong male predilection (2:1) was observed for the concurrent positive history of HTN and presence of CAC. The mean age for the presence of a CAC in patients with and without HTN were 71.5 and 71.8, respectively.

**Discussion/Conclusions:** Our findings suggest a significant correlation between history of hypertension and the presence of CAC, with a strong predilection for men. No significant correlation was observed between antihypertensive medications and CAC.

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**CONE BEAM COMPUTED TOMOGRAPHIC ASSESSMENT OF THE DISTANCE BETWEEN THE INCISIVE CANAL AND MAXILLARY CENTRAL INCISORS.** S. KHURANA<sup>A,B,C</sup>, M. NOUJEIM<sup>A,B,C</sup>, P. MUKHRJEE<sup>A,B,C</sup>, A. CREANGA<sup>A,B,C</sup>, M. MUPPARAPU<sup>A,B,C</sup>. <sup>A</sup> UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO, SAN ANTONIO, TX, <sup>B</sup> RUTGERS SCHOOL OF DENTAL MEDICINE, NEWARK, NJ, <sup>C</sup> UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA