

CASE REPORT

Spontaneous Regeneration of Bone after Resection of Central Giant Cell Lesion: A Case Report

Roger R. Thronson, DDS, FACD
John Mark Johnson, DDS

Introduction

Central giant cell tumor (central giant cell granuloma, giant cell lesion, giant cell tumor) formerly designated as a reparative granuloma is widely considered nonneoplastic and not reparative, but rather an aggressively destructive osteolytic lesion (1). These tumors are not unique to the jaw as they are found in long bones and are not odontogenic in origin. The giant cells have osteoclast receptors and therefore represent osteoclast precursors or are themselves osteoclasts. In the jaws, central giant cell tumors present as painless clinical expansion with bluish tint because of its cortical and mucosal thinning and internal vascularity. Occasionally, the patient will report pain in the area due to rapid expansion that results in stretching the underlying periosteum.

The peak range of occurrence is between 5 and 15 years of age but also reported as occurring from 2 to 80 years of age (1,2). Women are affected twice as frequently as men and the mandible is involved 3 times as frequently as the maxilla. This lesion is known to cross the midline and is more frequently located in the anterior aspect of the jaw. Radiographically, the central giant cell tumor is classically appreciated as a multilocular, radiolucent lesion with



Thronson



Johnson

Dr Thronson, associate professor and chief, Department of Surgery/Division of Oral and Maxillofacial Surgery, University of Texas Medical Branch-Galveston, Galveston, Texas.

Dr Johnson, resident, Oral and Maxillofacial Surgery, Galveston, Texas.

Author to whom correspondence to be addressed:

John Mark Johnson, DDS, Resident, Oral and Maxillofacial Surgery, University of Texas Medical Branch-Galveston, 301 University Blvd, Galveston, TX 77555-0531.
Cell: 501-278-0347; Fax: 409-747-7378; E-mail: jm3johns@utmb.edu.

The authors have no declared potential conflicts of interest, relationships, and/or affiliations relevant to the subject matter or materials discussed in the manuscript.

This manuscript has been peer reviewed.

ABSTRACT

There are several treatment modalities to date for central giant cell granuloma including conservative treatment and surgical treatment with often planned reconstruction of the bony defect. Spontaneous bone regeneration of mandibular defects following complete resection of mandible has rarely been reported in the literature. We report a case of spontaneous bone formation after resection of a central giant cell granuloma in the anterior mandible of a pediatric patient and the importance of maintaining the periosteum during surgical resection as a rare case report.

KEY WORDS: central giant cell, regeneration, treatment, periosteum

Tex Dent J 2013;130(12):
1201-1209.

CASE REPORT

Case Report of an Oral Fibroma Occurring in a Patient with Familial Multiple Lipomas

Lida Radfar, DDS, MS
Tyler Holt
Farah Masood, DDS, MS

Introduction

Irritation fibromas are the most common benign soft tissue tumors seen in the oral cavity. This focal reactive hyperplasia occurs due to irritation or trauma. The mass includes granulation tissue and scar formation due to the repair process. The size of these lesions does not usually exceed 1 to 2 cm. The fibroma occurrence corresponds with intraoral areas that are prone to trauma such as the tongue, buccal mucosa, and labial mucosa (1).

Case Report

A 79-year-old female presented to the University of Oklahoma College of Dentistry to get a new set of dentures. The patient was edentulous and had been wearing dentures for 58 years. She had no other complaints. Medical history was significant for controlled type 2 diabetes, hypertension, high



Radfar



Holt



Masood

Dr Radfar is a diplomate, American Board of Oral Medicine; associate professor of oral medicine, University of Oklahoma College of Dentistry, Oral Diagnosis and Radiology Department, Oklahoma City, OK.

Tyler Holt is a senior dental student.

Dr Masood is a diplomate, American Board of Oral and Maxillofacial Radiology; professor and director of radiology, Department of Oral Diagnosis & Radiology, University of Oklahoma College of Dentistry, Oklahoma City, OK.

Corresponding author: Lida Radfar, DDS, MS, 1201 N Stonewall, OKC, OK 73117; Phone: 405-271-5988; Fax: 405-271-3158; E-mail: lida-radfar@ouhsc.edu.

The authors have no declared potential conflicts of financial interest, relationships, and/or affiliations relevant to the subject matter or materials discussed in the manuscript.

This manuscript has been peer reviewed.

ABSTRACT

A wide variety of lesions may manifest in the oral soft tissues that could be confusing and challenging for the clinicians. These lesions could be as simple as trauma-induced ulcers that need about 2 weeks to heal, to a more complicated situation such as oral cancer. The key points in developing diagnosis and a possible treatment plan may include a comprehensive oral examination, simple understanding of normal oral tissue features, and knowledge of common oral lesions. This will help in the development of a differential diagnosis of the oral lesions/masses based on the risk factors in that particular patient. In this case report, we present a simple oral mass in a patient who had an oral fibroma and lipomas in other areas.

KEY WORDS: oral lesions, lipoma, fibroma

Tex Dent J 2013;130(12): 1195-1199.