Osseous chorıstoma of the buccal mucosa

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Özet

Bukkal Mukozada Osseous Choristoma vakası

Choristoma anormal lokalizasyonda gelişen normal hücre kitlesi gibi görünen tümördür.
Ağız içi Osseous Choristoma çok görülmeyen bir lezyondur. Bu tür bir lezyonun bukkal mukoza da görülmesi çok seyrektir. Bukkal mukozada sadece 11 tane oseos choristome bildirilmiştir. Bunlardan hiç birisinde kollojen immunohistokimyasal olarak çalışılmamıştır.

Anahtar kelimeler: Choristoma, bukkal mukoza, immunohistokimya

Abstract

Choristoma is defined as a tumor like mass of normal cells that has developed in an abnormal location. The intraoral osseous choristoma is an uncommon lesion. The occurence of such lesions in the buccal mucosa is extremely rare. Only 11 previous cases of osseous choristoma have been reported in the buccal mucosa. None of them was studied for collagen immunohistochemistry.

Key words: choristoma, buccal mucosa, immunohistochemistry

Introduction

Chorisoma is defined as a tumor-like mass of normal cells that has developed in an abnormal location. The intraoral osseous choristomas are rare lesion. Only 11 previous cases of osseous choristoma have been reported in the buccal mucosa. (1-9) Of these only one is near the orifice of the parotid duct like the case presented (4). None of them was studied with immunohistochemistry. The purpose of this report is to present a new case of osseous choristoma in the buccal mucosa studied with collagen immunohistochemistry.

Case

A 31 year-old man had a firm, tender, slowly growing, sessile, mass in the left buccal mucosa just below the orifice of the parotid duct. The lesion has been present for approximately one year. The diameter of the mass was 8 mm and had a normal overlying mucosa. The mass was not attached to parotid duct .It was easily removed with a margin of normal tissue with the patient under local anesthetic and submitted for histologic examination. There was no post-operative complication.

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Gross examination of the surgical specimen revealed a 1×0.8×0.5 cm in dimentions, ovally, well-circumscribed, hard, pale gray-pink fragment of tissue. The specimen was decalcified and routinly processed to parafin and sections were stained with haematoxylin and eosin and by immunohistochemistry using streptavidin-biotin-peroxidase technique and antibodies to collagen type I (Novocastra, UK) and type III (Oncogene, Canada). Microscopic examination showed well-circumscribed osteocytes seen in the lacunae. There was no cellular activity of either osteoblasts or osteocytes at the periphery of the trabeculae. Intertrabecular space was irregular and contained loose fibrous tissue and fatty marrow. There were several seromucineous buccal salivary glands in the surrounding tissue (Fig. 1). Immunohistochemically, bone trabeculae were confirmed type I collagen (Fig. 2), and connective tissue adjacent to lesion was confirmed type I and III collagen (Fig. 3). On the basis of these findings, the histologic diagnosis of osteoma was made. Since this type of tissue is not normally present in buccal mucosa, it was referred as choristoma. No recurrence of the lesion has been noted over an 18-month follow-up period.

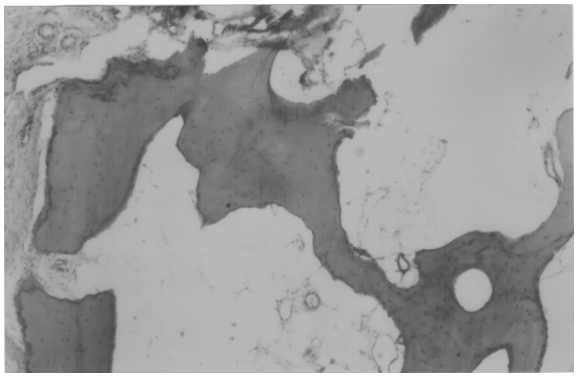

Figure 1: Osseous choristoma composed of woven bone surrounded by fibrous tissue and buccal salivary gland (HE×40).

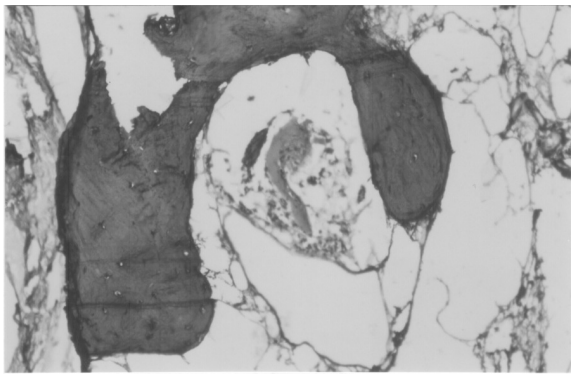

Figure 2: Immunohistochemical staining of bone trabeculae confirming type Icollagen (Original Magnification×100)

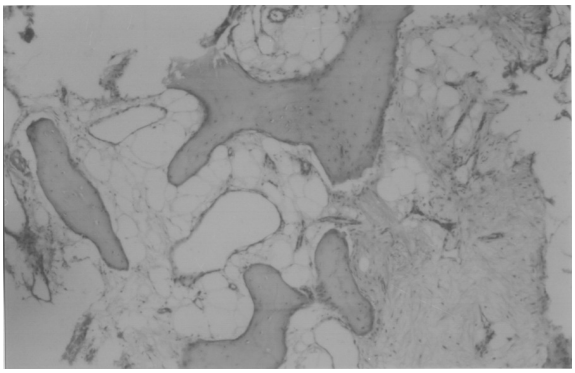

Figure 3. Immunohistochemical staining of connective tissue adjacent to lesion confirming type I and III collagen (Original Magnification, ×100)

Dıscussıon

The intraoral osseous choristomas are uncommon lesions. The occurence of such lesions in the buccal mucosa is very rare. To our knowledge, 11 cases have been reported in the world literature (1-9). Review of the 11 reported cases showed the mean patient age to be 43 years with range of 12 to 75 years with an almost equal sex distribution. It is seen most frequently in adolescents and young adults. The lesions were up to 2 cm in diameter. The tumor is seen as a firm nodule that may be sessile or pedunculated and has the clinical appearance of a fibroma (10). Of these only one is reported to have recurred (8). Most of them were asymptomatic. Microscopic examination of osseous choristomas were seen normal, well-circumscribed lamellar bone surrounding bone marrow or fibrous tissue (6). The cause of the osseous choristomas is unknown. Several ideas have been proposed. Ossification of branchial arch remnants, epignathous formation, congenital abnormality, ossification of lymphatic tissue, ossification of dejenerating fibroma and viral theory are some of them (1, 11).

Van der Rest et al.(12) reported a case of congenital primary cutaneous osteoma of which mineralized tissue containing a matrix similar to bone. The lesion contained only type I collagen, but, as expected the normal skin adjacent to lesion contained type I and III collagen. In review of the 11 reported choristomas of buccal mucosa, there was no study associated with collagen immunohistochemistry. In our study, the mineralized tissue contained a matrix similar to bone. The lesion contained only type I collagen, whereas fibrous tissue adjacent to the lesion contained type I and type III collagen as cutaneous osteomas. The study demonstrates the osseous nature of the lesion. Choristoma must be considered among the differential diagnosis of masses of buccal mucosa. This case is the first osseos choristoma in the buccal mucosa from Turkey. Due to our findings we can suggest that immunohistochenical staining can give more detailed information and be beneficial in diagnosis.

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