

## Heterotopic Salivary Gland Tissue in the Face

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Choristoma is a nonneoplastic proliferation of histologically normal tissue that forms at an abnormal site. Heterotopic salivary tissue is a rare lesion, although most authors agree that anomalous embryologic development of salivary tissue is the main cause. It is unusual condition that occurs most frequently in various locations within the head and neck. The goal of our study is to demonstrate the prevalence of accessory salivary tissue in the face and its clinical importance. We describe 6 cases of 120 dissections with accessory salivary tissue located in the face. All 6 findings are isolated glandular tumor masses placed in the surrounding musculature. Salivary gland choristoma is located in various parts of the body and is diagnostic problem for the physicians. This ectopic glandular tissue may be a place for pathologic conditions like fistulae, adenomas, abscesses, and calculosis. In conclusion we consider that though rare this condition is important to be taken in mind during the routine clinical examination.

The aim of our study is to demonstrate by routine anatomic dissection the prevalence of ectopic salivary tissue in the face among Bulgarians and to build a classification of choristoma's localization from a review in the literature.

*Key words:* salivary gland choristoma, salivary gland adenoma, heterotopic salivary tissue.

### Introduction

Heterotopic salivary gland tissue (HSGT) consists of salivary tissue outside of the major and minor salivary glands. HSGT, also known as ectopic or choristomatous salivary gland, is unusual condition that occurs in various locations within the head and neck [7]. Additional sites have been reported and include the mandible [1], middle ear [5], pituitary [12], parathyroid [4], mediastinum [6], and rectum [13]. Other authors report rare locations of choristomas larynx [8], in the vulva [9] and the anterior chest wall [10].

### Description

Our team describes six cases of HSGT located on the face found during dissection of 120 half embalmed heads in the department of anatomy. All of the six findings were isolated glandular tumor mass situated among facial musculature. Two choristomas were placed in the labial region (Fig. 1) and 4 in buccal region (Fig. 2). The former were in the upper lip and the latter close to the oral angle (two of them) and the rest in the

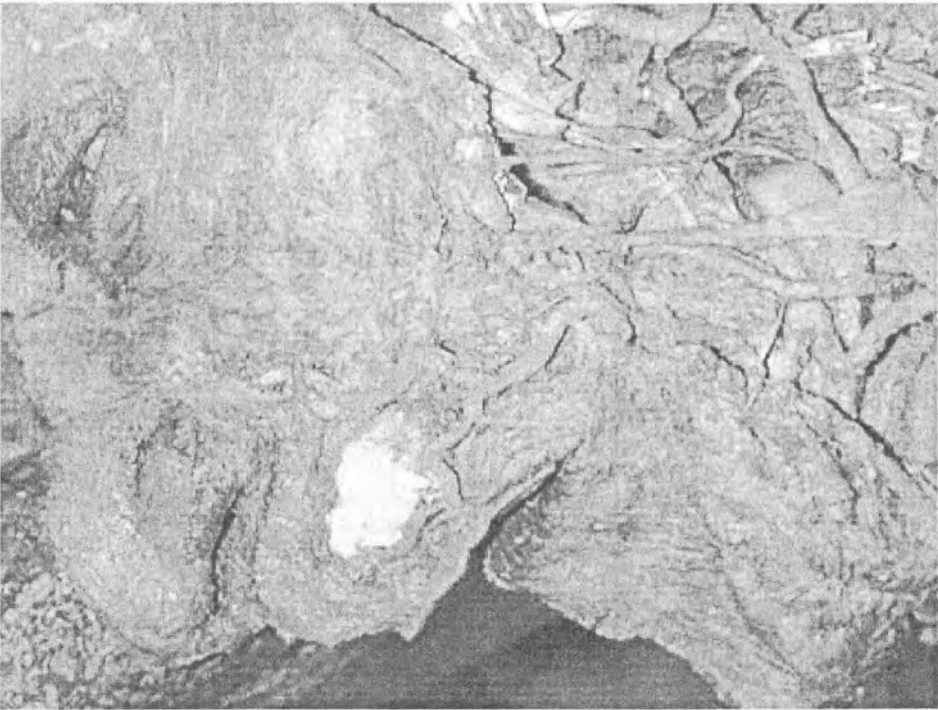
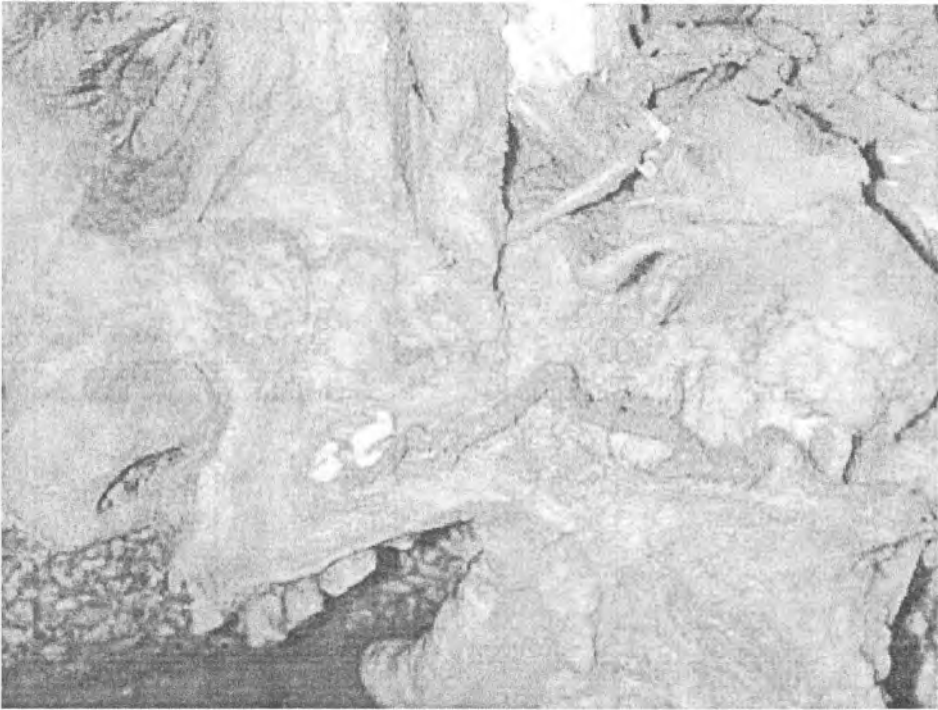


Fig. 1. Labial choristomas

Table 1. Choristomas with different location

Location	Authors	No of Cases	Country
<b>Head</b> – <i>facial</i> – <i>intracranial</i> a) ear б) intrasellar в) pontocerebellar – <i>other</i>	present study*; **3 reports 13 reports (middle ear) + 1 (external ear) Schochet SS et al.; Kato et al., Tatter et al. Rodriguez F et al.; Curry B et al. 6 reports	*6 or 60; **3 14 78 or 2300; 2 sympt. 1 case each 2 1 pterygopt. fossa, 2gingivae, 2mandibles, 1 palatine tonsil	*Bulgaria; ** (Korea, UK, France) multinational Japan and USA USA UK, Mexico, USA
<b>Neck</b> – <i>soft tissues</i>  – <i>organs</i>	*Daniel E et al.; **Youngs LA et al.; #Lassaletta- Atienza at al.; ##Haemel A et al.: (7 reports)  3 reports	*24; **11; #5; ##11: (7 - 1 case each)  1 larynx, 1 pharynx and 1 parathyroid gland	***USA; #Spain: (Germany, Argentina, Korea, UK, France, USA)  Poland and USA
<b>Thorax</b> – <i>wall</i> – <i>mediastinum</i>	Shin CE et al. Feigin GA et al.	1 1	USA
<b>Abdomen</b> – <i>rectum</i> – <i>vulva</i>	Weitzner S; Downs-Kelly et al. Marwah S et al.	2 till 1983; 1 1	USA

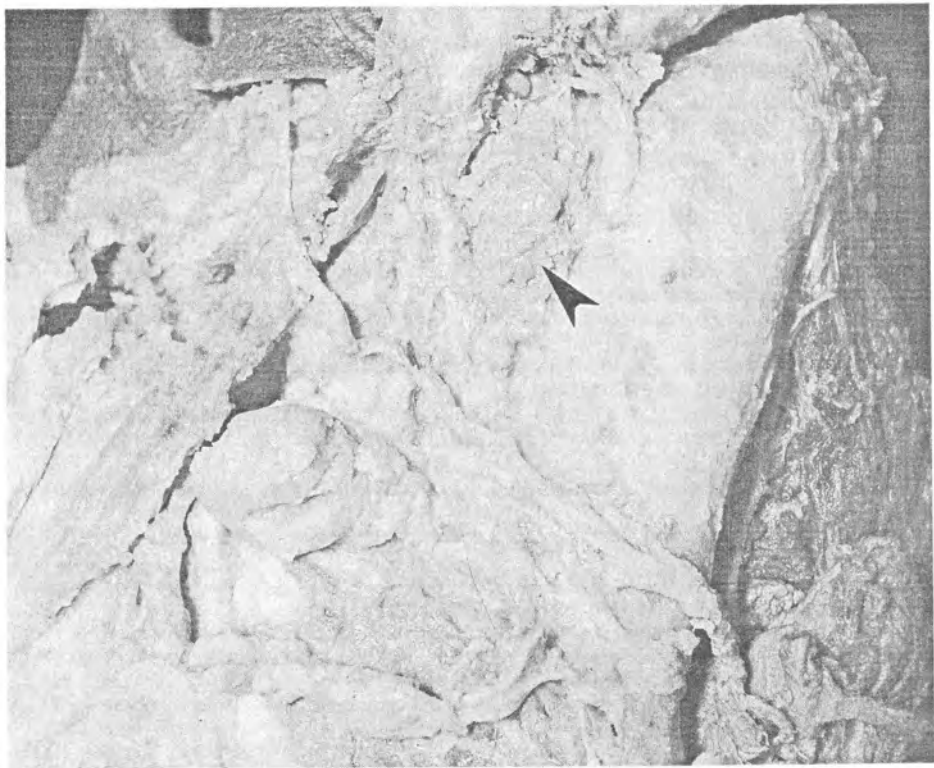
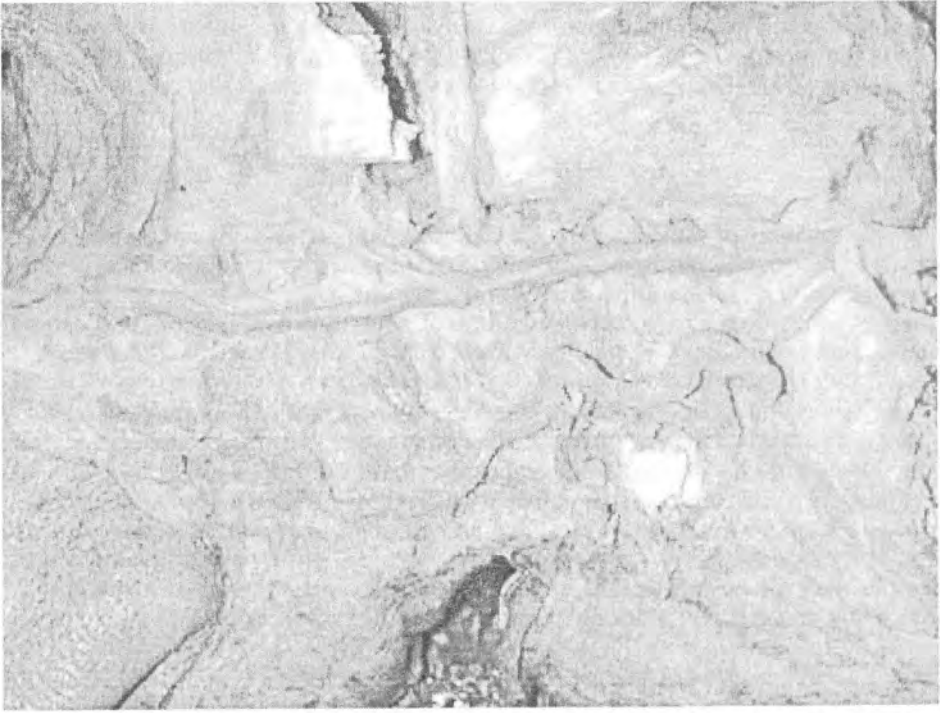


Fig. 2. Buccal choristomas

center of the cheek. The tumors dimensions varied from a few millimeters to few centimeters and the most prominent was with length 24 mm and width 13 mm. The major salivary glands of the investigated heads were with normal anatomic characteristics.

## Discussion

Although the etiology of salivary gland choristoma is not completely understood, most authors agree that an aberration in embryologic development is involved [5]. The more common location of HSGT in the head and the neck is probably due to the adjacent proximity of the structural derivatives. A finding of choristomas in other places can be related to a number of factors. Generally heterotopia can occur in several different ways: a) abnormal persistence and development of a vestigial structure; b) dislocation of part of definitive organ rudiment during embryologic development; and c) abnormal differentiation of the local tissues because of their peculiar situation in malformations [11].

Salivary gland choristoma is unusual tumor mass not rarely found in head and neck. White et al. describe accessory salivary tissue in the mylohyoid boutonniere [14]. Some cases with HSGT located in mandible and gingivae are reported as the classical mandibular position is in its posterior region [2, 3]. Other investigators report choristomas with different locations in the body. All ectopic positions of choristomas may cause diagnostic problem for clinicians and radiologists (Table 1).

## Conclusion

To diagnose choristoma – adenoma, which is a benign tumor or using the morphologic term heterotopic (ectopic) salivary gland tissue, which is a typical anatomical variation with heterotopic localization, is of importance for the doctor and for the examined patient.

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