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Review of choristomas of the oral cavity

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ABSTRACT:-

The choristoma is a tumorlike mass of normal cells in an abnormal location. Intraoral choristomas have been reported under a wide variety of names. This comprehensive review of the English-language literature on oral choristomas offers a classification of these lesions, analyzes their clinical and histologic features, and discusses possible pathogeneses and treatment.

Keywords*:* Choristoma, thyroid, sebaceous.

INTRODUCTION: -

A cohesive mass of normal cells that resembles a tumour that is located abnormally is referred to as a "choristoma." This makes it distinct from the hamartoma, a deformity with tumor-like characteristics made up of a focal overgrowth of mature normal cells where they are ordinarily found. Both are distinct from benign tumours. Depending on the kind of displaced cells, masses of normal but heterotopic cells that resemble intraoral tumours and fulfil the description of choristoma have been described under a number of other names. Many of the labels that are frequently used are incorrect; for instance, the phrases "tumour" and "heterotopia" do not accurately describe the clinical behaviour and microscopic pattern of nonneoplastic lesions. A classification of these lesions is not accessible, and there have only been a few research reported on choristomas in oral regions. In order to create this thorough review article, we made an effort to locate every case that was mentioned in the English-language literature. Our goal was to create a main classification of oral choristomas, assess

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their clinical and histomorphological characteristics, and talk about the terminology and aetiology of each unique entity in the classification.

METHOD AND MATERIAL:-

The following Medical Subject Headings were used in the MEDLINE search for the study: "choristoma," "hamartoma," "osteoma," "chondroma," and "glioma," along with "jaw," "mandibular," "maxillary," "head and neck," "mouth," and "oropharyngeal neoplasma," and "thyroid gland," along with "tongue" and with "tongue To find relevant cases recorded prior to 1966, an additional manual search was carried out.For previously reported cases to be included, the following conditions have to be met: The lesion manifested clinically as either a radiolucency in the jaws or a tumor-like development in soft tissue. The tissues were of a type not typically present in the area, but histologically, the displaced tissues showed a normal pattern and no malignant characteristics. The lesions were categorised into one of the following groups according to the different tissues that were identified:

1. Salivary gland choristoma

Central; gingival

2. Cartilaginous choristoma

3. Ossified choristoma

4. Lingua1 thyroid choristoma

5. Lingual sebaceous choristoma

6. Global choristoma

7. Gastritis mucosal choristoma

Cystic, solid,

Oral lesions comprising respiratory epithelium5 are regarded as a type of metaplasia, and ectopic lymphoid tissuelm4 typically manifests in the oral cavity as a component of the lymphoepithelial cyst. So they were not included. Several cases of a tumor-like mass with hair follicles on the gingiva and skeletal muscle in the vicinity of the maxillary lateral incisor and its attachment to the overlaying mucosa have been documented. Despite the fact that these lone cases meet the requirements for choristoma, the development of new entities such as intraoral hair follicle choristoma and intraoral skeletal muscle choristoma need the accumulation of more qualified cases for examination.

Choristoma of the salivary glands

It has been documented occasionally that tumor-like masses of abnormal salivary gland tissue exist in the oral cavity. Our search turned up only 23 cases, many of which weren't choristomas, that had been histologically or by sialography2* evaluated. As 14 of these

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situations, the salivary gland tissue was visible in a lingual indentation on the mandibular or as a pedunculated mass that extended into the jaw through a perforation in the inner plate and connected to the submandibular or sublingual glands. *-19 These examples were not thought to fit the definition of choristoma because of the relationship to the salivary gland. However, in five instances, the mandible served as a sole enclave for the salivary gland tissue. These lesions have been given many names, including "latent" or "static bone cyst," "salivary gland inclusion in the mandible," and "aberrant salivary gland defect." [20] The abnormal salivary gland tissue, which was designated "gingival salivary gland choristoma 9925-28" in the remaining four cases, was located in the associated gingiva.

The term "latent" or "static bone cyst," coined by Stafne29, denotes simply a hollow between the mandibular canal and the angle and makes no mention of the type of cavity or its contents. The word "salivary gland choristoma" would be a more appropriate phrase to describe nonneoplastic aberrant or ectopic salivary gland tissue that manifests as either a raised tumorlike mass or as a tumorlike radiolucency. In accordance with their precise location, the lesions can be divided into two categories: central and gingival salivary gland choristoma.

Central salivary gland choristoma.

The unusual condition known as a central salivary gland choristoma is described as a solid mass of salivary gland tissue completely enclaved in the jaw by intact cortical plates, with no sign of attachment to the submandibular or sublingual glands. This subclassification could contain five recorded cases. There were five in the mandibular anterior20 and one in the mandibular angle with the cana1. 21 Age at diagnosis ranged from 26 to 53 years; there were three cases in men and two in women. A youngster having this lesion has not been documented. Clinically, the lesions were round or oval, well-circumscribed radiolucencies with reasonably well-defined sclerotic borders, and they ranged in size from 0.5 to 2.5 cm. It's possible that the limited mucous discharge from the enclaved salivary gland nodule caused the infrequent complaint of tenderness at the site of the lesion.

Gingivai choristoma of the salivary gland

In 1964, Moskow and Baden published the first description of the gingival salivary gland choristoma, describing it as a tumor-like mass made up of healthy salivary tissue. We discovered a total of four reported cases. Of these four cases, two were male patients25, 26, one involved a female patient28, and in the other case, the sex was not disclosed. 27 Age at diagnosis ranged from 9 to 44. The gingiva of the anterior maxilla (in two cases), the third mandibular molar (in one case), and the gingiva of the anterior mandible were the places that were noted (one case). Clinically, each lesion presented as asymptomatic, single, tumor-like lumps of soft tissue in the buccal or lingual gingiva that ranged in size from 0.5 to 1.5 cm. There was no evidence of bony involvement.

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A calcigenic choristoma

Soft tissues have been found to contain artilage, such as tendons, tendon sheaths, and extraarticular tissues in the hands and feet. In the soft tissues of the oral cavity, only few cases have been documented. Twenty cases were documented in our literature search. The tongue (17 cases), buccal mucosa (2 cases), and soft palate (all 20 cases) all had extraskeletal cartilaginous nodules (1 case). The age at diagnosis was between 10 and 80 years old, with a mean of 47 years. Eight patients (42%) were men compared to eleven (58%) women, and sex was not mentioned in one case. The masses were getting bigger, clinically speaking. Sizes ranged from a few millimetres to more than a metre, with the largest being 13 x 10 cm in diameter. Sometimes there was dysphagia or dysphonia due to the size of the mass, as well as superficial mucosal inflammation (perhaps brought on by irritation from biting or pressure from a denture). There have been no reports of cartilaginous choristoma recurring in intraoral cases. However, certain extraoral cases of "chondroma of soft parts" have been observed to return, most likely as a result of insufficient excision. Complete excision, including the removal of the surrounding soft tissue, is advised since the perichondrium and nearby connective tissue may have the capacity to produce new cartilage.

Choristoma osseous

The term “osseous choristoma” was introduced by Krolls eta1.58 to describe a tumorlike growth of normal, mature lamellated bone occurring in the soft tissues of the oral cavity. This uncommon lesion is also known as “osteoma mucosae” or “soft tissueosteoma,” and is analogous to the dermal lesion “osteoma cutis.” Since 1913, when Monserrat’s original report appeared, 39 cases have been reported in the English-language literature.58y 60-70 Of 39 cases, 34 (85%) occurred in the posterior dorsum of the tongue near the circumvallate papillae or the foramen cecum.s8’ Three (8%) OCcurred in the middle third of the dorsum of the tongue,62-64 one (3%) in the lingual aspect of the alveolar process of the anterior mandible,65 and one (3%) in the left mandibular buccal vestibule.67 Twenty-eight lesions (72%) were present in females and only 11 in males, making the female/male ratio 2.7:1. The youngest patient at diagnosis was an 8-year-old girl, and the oldest was a 73-year-old man; the average age was 30.7 years. However, the reported duration of the lesions ranged from several months to several years.

The osseous choristoma's root cause is unknown. These lesions' close closeness to the foramen cecum suggests a developmental anomaly. Several suppositions, include the ossification of branchial. There have been theories about arch remains and ectopic mesenchymal cell formation. Epignathous development and an ossifying fibroma are two further hypotheses. The lesion is removed surgically as part of treatment. There hasn't been any information about recurrence or malignant change.

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Choristoma of the lingual thyroid

It has been observed that lingual thyroid tissue, also known as ectopic thyroid tissue, has grown tumor-like. Although still debatable, this clinical entity is referred to as a "choristoma" since it differs from latent ectopic thyroid tissue by having tumor-like manifestations. The latter is a developmental oddity made up of a collection of thyroid tissue, or tiny, dispersed islands, that can appear anywhere along the thyroid primordium's route of descent, including the base of the tongue. Its incidence is believed to be significantly higher than that of lingual thyroid choristoma due to the fact that it is asymptomatic. Given that lingual thyroid remains have been discovered in 10% of 200 standard autopsies and in 9.8% of 184 cadaver tongues, it is likely that 1 in 10 people carry these minuscule lingual thyroid remnants. The lingual thyroid choristoma is uncommon, on the other hand. In our database of 50,000 oral biopsies, we were unable to locate a single case. Because any condition that affects the thyroid gland may also include ectopic thyroid, lingual thyroid choristoma may experience pathologic alterations such as cysts and cancer. It is highly uncommon for a carcinoma to arise in lingual thyroid tissue. Only three published cases—two in 40-year-old women and one in a 12-year-old boy—have been reported in the English-language literature since 1965. All three patients were diagnosed as follicular carcinoma. For this reason, before implanting the tissue into other sections of the body, a frozen-section analysis of the specimen should be performed to rule out cancer.

An articular sebaceous choristoma

There have been numerous reports of sebaceous glands in the gingiva, palate, retromolar region, buccal and labial mucosa, and other areas of the oral mucosa. Since sebaceous glands have been found in over 80% of people, we do not consider them to be ectopic glandular tissue in these areas. Rare accounts do exist, though, of a collection of sebaceous glands in the tongue's dorsum, which is unusual. The term "sebaceous choristoma" was initially used for this specific entity by Leider et al., and there have been about six occurrences documented in this locality in the English-language literature. Five of the six lingual sebaceous choristoma instances included men, and one involved a woman; the patients' ages at diagnosis ranged from 23 to 73. In two cases, lesions were located around the foramen cecum in the dorsal midline of the posterior third, and in one case, the middle third. In two cases, the lesions also developed at one side of the middle third's dorsal midline. One of them had an easily visible central ostium, and investigation with a blunt probe revealed that this was the opening of a duct that ran parallel to the dorsum of the tongue all the way to the foramen cecum. According to Leider et al. and Knapplo, the lesions that were connected to thyroglossal duct-like structures may have been the source of their instances. Due to the absence of lymphoid tissue close to their lesion, Guiducci and Hyman thought their instance showed "ectodermal sequestration" within the tongue during development.

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Glenoid choristoma

Outside of the cranial cavity, tumorlike formations made of mature brain tissue are remarkably rare. Most of the cases that have been reported in the English-language literature have been found in or around the nose, nasopharynx, eye orbit, and lung. It is highly uncommon for these tumours to develop in the oral cavity without having any relationship to the central nervous system. There have been 13 oral cavity instances documented in all to date. Macomber and Wang*** postulated that the separation of the ceiling from the anterior region of the brain during early embryonic development is the cause of glial choristoma. According to Shapiro, Mix, and Kurzer et al., the lesion results from a misdirected primordium. This latter approach might provide a more comprehensive explanation for the oral cavity lesions. Glial choristomas are advised to undergo surgical excision. Recurrence, caused by partial excision due to technical challenges in detecting the extent of the lesion, is extremely uncommon.

Choristoma of the gastric mucosa

"Stomach mucosa at base of tongue" was how Toyama originally referred to the oral lesion comprising heterotopic gastric components in 1927. Because of its unusual location and harmless tumorlike growth, we refer to this lesion as a "gastric mucosal choristoma." The number of cases of intraoral gastric mucosal choristoma recorded since 1960 is 21. In all but two of these cases, a cyst within the oral cavity was the primary presenting feature, according to a detailed analysis of the cases. Because of this, cystic or solid forms of stomach mucosal choristoma may be subclassified. Choristoma cystica gastroenteritis. This condition is characterised as an oral cystic lesion that is typically partially bordered by stratified squamous epithelium, partially by gastric mucosa, and sporadically by intestinal epithelium. 19 cases were documented, 12 (63%) of which involved the ventral surface of the tongue and typically extended to the floor of the mouth, four (21%) the anterior third, and three (18%) the mid-dorsum. Both men and females had twelve esions (63%) each. Most of the lesions developed during infancy or the first few years of life, and many were neglected for long periods of time.

From baby to 31 years old, the patients' ages at the time of diagnosis. Solid Gastritic Mucosal Choristoma. During 1972, Gruskin, ORAL SUKC; ORAL MED ORAL PATHOI. On the dorsum of the tongue, at the point where the anterior third and posterior two thirds meet, a 20-year-old man had a 2.0 X 1.5 X 1.5 cm polypoid mass that I and Landolfe'46 documented. 14 years ago, the lesion was surgically removed after being there since birth, but it progressively came back. This recurring mass was removed, and microscopic analysis revealed that the majority of it was made up of mucosa that was almost exactly like the mucosa present in the fundus and body of a typical stomach. A simple columnar epithelium that Ied into gastric pits and glands covered the surface of the bulk and was mucin-secreting. Cells found in the glands were identical to parietal, chief, and mucous neck cells in healthy individuals. Multiple layers of smooth muscle bundles that made up a muscular mucosae

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were present beneath the glands. These two examples are the only ones in which a solid mass of heterotopic gastric mucosa has been found in the mouth cavity. We believe that the term "solid gastric mucosal choristoma," as opposed to the cystic lesion, is suitable because the findings in these examples consisted of an ectopic gastric mucosa clinically and a tumorlike mass under the microscope.

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