# Submucosal Chondroid Syringoma of the upper lip

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# Case Report

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## **ABSTRACT**

Observation - A 24 years old man was presented for a mass of the upper lip that has been evolving for four months and was responsible for an undesirable non-symmetrical smile. The CT scan that was performed revealed a well marginated heterogenous mass of the upper lip, measuring 2cm in diameter. Histopathological examination showed a typical mixed composition of epithelial and mesenchymal components featuring cartilage metaplasia. Treatment involved complete excision of the mass

Discussion - Chondroid syringoma is characterized by its adnexal tumor nature. Nevertheless, its histological identification remains straightforward. The standard treatment typically involves complete excision, ensuring removal of the tumor along with a margin of normal tissue. Occurrence of malignant transformation is rare and necessitates regular annual observation.

Key Words: chondroid syringoma, upper lip, submucosal

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# INTRODUCTION

Chondroid syringoma, a rare cutaneous tumor falling within the adnexal skin tumor category, is generally benign with a favorable prognosis. Treatment typically involves the complete excision of the tumor lesion. Despite being relatively unfamiliar to surgeons and pathologists, it plays a role in the differential diagnosis of various skin tumors on the face, encompassing both benign and malignant conditions. Here, we present a case involving a slowly progressing submucosal chondroid syringoma of the upper lip with an asymmetrical smile.

#### **OBSERVATION**

Our patient was 24 years old, who had been living with a swelling of the inner side of the superior lip leading to an undesirable and asymmetrical smile. He had no history of other diseases and he was not receiving any medical treatment at that time. Upon examination, the submucosal mass was oval in shape, with regular contours and very hard in consistency, having a mobile base and a clean surface that was traversed by telangiectatic vessels. The mass was painless, not beating, nor bleeding or exuding any purulent secretion, measuring about 2.5 cm in diameter. The remainder of the clinical examination revealed no abnormalities.

A CT scan was performed, revealing a well marginated heterogenous mass measuring 20.2 x 14.6 x 11.3 mm.

After discussion with the patient, it was decided to carry out an excisional biopsy under local anesthesia. The histological examination revealed the presence of a benign tumor characterized by a dual composition. This includes an epithelial component consisting of clusters and tubes lined with normal squamous cells, alongside a mesenchymal component comprising non-atypical fibroblasts mixed with a myxoid stroma featuring cartilage metaplasia.

The patient was seen 10 days postoperatively. The area was healing without any complications and the patient regained his symmetrical smile back.



Figure 1 – Clinical aspect of the mass.



Figure 2—The mass is responsible of a non-symmetric smile.

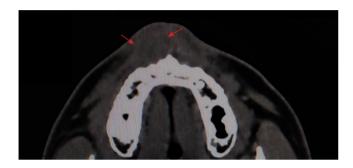


Figure 3 – CT scan of the upper lip mass

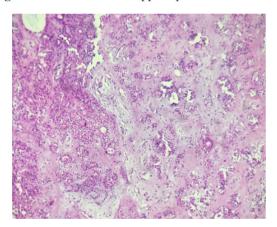


Figure 4 – microscopic examination revealing a mixed composition featuring cartilage metaplasia.



Figure 5 – The patient's smile becoming completely symmetrical after excision

#### DISCUSSION

First described by Billroth in 1859, chondroid syringoma is an uncommon cutaneous adnexal tumor known for its typically slow growth, favorable prognosis, occasional diagnostic challenges, and morphological resemblance to mixed tumors found in salivary glands. It is characterized by a dual composition of both epithelial and mesenchymal components. [1] Mostly found in the head and neck region as reported by Hirsh and Helwig on a 188 case study with the following descending order of frequency: nose, cheek, upper lip, scalp, forehead, and chin. [2]

From a clinical standpoint, these lesions are frequently misinterpreted as dermoid or sebaceous cysts, neurofibromas, dermatofibromas, or pleomorphic adenomas of the salivary glands. As a result, making a pre-excision diagnosis of these lesions is often challenging, with definitive identification typically achieved only through excision or biopsy. [3]

The microscopic diagnosis of the lesions is generally straightforward. Histological analysis reveals a mixed tumor, comprising both epithelial and mesenchymal components. The mesenchymal portion exhibits variability, presenting as myxoid, chondroid, adipose, or fibrous, containing clusters of epithelial cells devoid of glandular structure or as isolated cells. The epithelial component consists of glands, distinguishing two types: the apocrine type with tubular or cystic glands, occasionally branched, lined by a dual layer of cuboid or flattened cells, and the eccrine type featuring narrower lumens and glands bordered by a single cell layer. Immunohistochemically, cells in the inner layer of the glands exhibit positive markers such as antikeratin, anti-epithelial membrane antigen, and anticarcinoembryonic antigen antibodies, affirming their epithelial nature. Conversely, cells in the outer layers lack expression of these antigens but do express the S100 protein and vimentin, suggesting a shared mesenchymal origin. [4, 5, 6] The established approach for treating chondroid syringoma is complete excision, including a margin of normal tissue [7]. Recurrence is infrequent and is often linked to incomplete excision, a consequence of the tumor's lobulated structure and the absence of a comprehensive capsule. [2,8]

#### **CONCLUSION**

Chondroid syringoma, although infrequently discussed due to its relative obscurity, is characterized by its adnexal tumor nature. Nevertheless, its histological identification remains straightforward, relying on the observation of both epithelial and mesenchymal components. The standard treatment typically involves complete excision, ensuring removal of the tumor along with a margin of normal tissue. Continuous annual monitoring is essential as a precaution against the potential, albeit rare, occurrence of malignant transformation, necessitating regular observation.

## **Conflicts of interest**

There are no conflicts of interest

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