

## Case Report

### A rare case of accessory tragi in the nose

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#### Abstract

This report presents a rare case of multiple accessory tragi, which developed at an unusual site outside of a derivative of a branchial arch, in this case the nose. Thus far, to our knowledge this is the 4<sup>th</sup> reported case of similar nature in the world. This case is significant in that, this is the first reported case with an accessory tragus present along the midline in the dorsum of the nose.

**Keywords:** accessory tragi, developmental, branchial arch.

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## Introduction

An accessory tragus which was first reported in 1858 by Birkett, is a congenital pedunculated or sessile lesion, most often unilateral and solitary but may be multiple or bilateral<sup>1</sup>. It may be soft or firm on palpation owing to the presence of cartilage within the mass. This nodule or lobule is skin coloured and roughly spherical. Diagnosis is based on appearance of the lesion, anatomical location and presence at birth. Accessory tragi are more commonly found near the auricle or along the line of ascent of the developing auricle, which lies along an imaginary line drawn between the auricle and the angle of the mouth<sup>2</sup>. Less commonly accessory tragi may appear at unusual sites such as the nose, glabella or suprasternal area.

## Case report

A 3-week-old female baby was transferred from a local hospital with multiple skin-coloured polyps in the nose, noticed at birth. One polyp was on her right nasal vestibule while the other took a midline position on the tip of the nose. The mother of the child was 26 years old and her antenatal history was not significant. The child was otherwise healthy and there was no history of breathing difficulty or signs of nasal obstruction evident at the time of admission. Examination of the head and neck region and rest of the body revealed no abnormalities. CT was not performed as the polyps showed no sign of extension.

Each lesion constituted a roughly spherical, soft, skin coloured mass with a short pedicle. The larger lesion, located in the nasal vestibule measured about 10mmx5mm in size.

The baby was anaesthetised with endotracheal intubation. Endoscopic nasal examination was performed to confirm that the larger polypoid lesion was confined to the nasal vestibule. Both lesions were completely excised. Histology revealed a polypoid lesion covered by skin containing numerous vellus hair follicles with accompanying sebaceous glands in the papillary dermis with a zone of adipose tissue in the centre. Cartilage was not present. They resembled the normal external auricle thus a diagnosis of multiple accessory tragus was made. Following diagnoses as accessory tragi, further investigations were performed to exclude renal and cardiovascular abnormalities.



Fig.1: preoperative picture

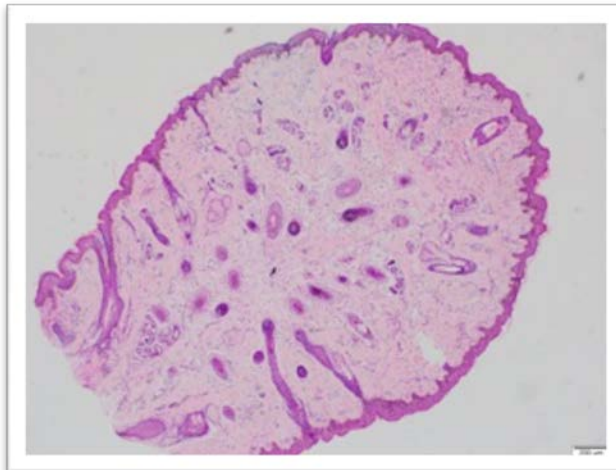


Fig. 2: Histology.

## Discussion

Accessory tragus is a fairly common congenital abnormality occurring, 1-10 per1000 live births <sup>3</sup>.An accessory tragus is present at birth and is usually an isolated abnormality but may rarely be associated with other genetic syndromes such as Wolf-Hirschhorn, Treacher-Collins, VALTERC, Goldenhar and Townes-Brooks. In addition, it can also be associated with hearing impairment, and renal abnormalities like horseshoe kidney and hydronephrosis. Accessory tragi are typically preauricular in position, pedunculated or sessile, skin-coloured papules or nodules. The size varies between 3-5mm and may be larger and covered with vellus hair <sup>4</sup>.

The auricle develops from six mesenchymal proliferations termed auricular hillocks derived from the 1<sup>st</sup> and 2<sup>nd</sup> pharyngeal arches <sup>5</sup>. They are initially positioned in the neck region, horizontally and laterally. As the mandible, also a 1<sup>st</sup> arch derivative begins to grow, the developing ear which is posterior to the mandible is similarly repositioned. Errors in the process involving the 1<sup>st</sup> arch gives rise to accessory tragus which are typically near the auricle but may be found anywhere along a line joining the tragus to the angle of the mouth. Tragi found on the cheek are owing to the embryonic origin of the maxilla being from the 1<sup>st</sup> arch while tragi along the lateral neck and anterior edge of the sternocleidomastoid follow the line of ascent of the developing auricle. Less common sites are the nose, the glabella or the suprasternal area which are outside the normal line.

Management includes complete excision of the lesion with relevant investigations to rule out other congenital abnormalities.

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