

**CASE REPORT ON PREAURICULAR CYST INFECTION**

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**ABSTRACT**

Preauricular cyst is a common congenital malformation and often asymptomatic but infection of the preauricular cysts can be presented with pain, inflammation, discharge and abscess formation. We report a case of infected preauricular cyst, presented along with mild pain on the right ear for a month, in an 8 year old girl. Surgical excision under general anesthesia was performed. Methylene blue dye is used to outline the sinus tract considering the fact that the chances of recurrence is less if the components of the sinus are excised completely.<sup>[1,2]</sup>

**KEYWORDS:** Preauricular cyst.**INTRODUCTION**

Preauricular sinuses are congenital malformations that usually occur at anterior margin of the ascending limbs of the helix of the external ear.<sup>[3,5]</sup> Developmentally, the external ear develops from six eminences on the mandibular and hyoid margin of the first external groove. Failure of the tubercles to fuse with each other or failure of some of these tubercles (hillock) to grow normally may produce a variety of external ear malformation such as congenital preauricular sinus.<sup>[4,5,6]</sup> Preauricular sinus is usually asymptomatic unless it is infected. A preauricular sinus was observed in front of the right ear of an 8-year-old female child with a recurrent swelling and mild pain for 1 month and the case was discussed in the guidance of the literature.

**CASE REPORT**

An 8 year old female child came with complaints of infected preauricular cyst at the right ear for 1 month along with mild pain. On Physical examination right pinna shows a cystic lesion near the anterior end of helix, but the other pinna and external auditory canal and tympanic membrane bilaterally normal. No abnormalities detected in nose, oral cavity or oropharynx. Hb; 12.5g/dl, TC; 10240ceels/microliter, other values were within normal range. The Assessment was infected preauricular cyst in the right ear. The plan of care was the excision of infected cyst under general anesthesia. If the components of the preauricular sinus are not completely excised recurrence is likely.<sup>[7,8]</sup>

Treatment plan include Inj. Montaz (ceftriaxone 500mg+ tazobactam 62.5mg) q12h, Syrup. Ibugesic plus (ibuprofen 100mg+ acetaminophen 162.5mg) 5ml TDS, Enterogermina (B.clausii) 1 vial. Fentanyl 50mg used as general anesthetic and during operation sinus seen over

the anterior end of right helix of pinna through the cartilage to form a cyst, methylene blue was used for the complete cyst visualization, an elliptical incision was put around the sinus, entire sinus tract, cartilage and cyst excised in toto. After the procedure the patient was comfortable, she had no complaints of pain and was afebrile. The Patient was discharged after 3days of procedure and discharge medication included Symp. Clamp kid forte 5ml TDS for 7 days, Enterogermina vial OD for 7 days, Symp. Ibugesic plus 5ml TDS for 3 days and Nadoxin gel for local application.

**DISCUSSION**

The auricle develops from the fusion of six mesenchymal proliferations, known as Hillocks of His. The most frequently cited and generally accepted theory attributes the development of Preauricular sinus to incomplete or defective fusion of the 6 hillocks. The other, less well known, published theory is that the sinus develops as a result of isolated folding during auricular development.<sup>[9]</sup>

Congenital preauricular lesions are malformations that are classified as preauricular sinus and first branchial cleft anomalies seen frequently during childhood.<sup>[10]</sup> The preauricular sinus is a blind canal, positioned mostly in front of the tragus and the helix, and extends from the epidermis to subcutaneous tissues, being one of the frequently seen congenital ear anomalies.<sup>[11]</sup> Several authors have reported that preauricular lesions could develop together with renal defects or other anatomical anomalies.<sup>[12]</sup>

The preauricular sinus abscess affects both sexes in this study like in other studies. The proportion varies from different studies and race. Some studies show that men

and women were equally affected.<sup>[13,15]</sup> Some works support women to be predominantly affected.<sup>[16,19]</sup>

## CONCLUSION

Preauricular sinus abscess is a congenital condition of the external ear, are located near the front of the ear and mark the entrance to a sinus tract that may travel under the skin near the ear cartilage. These tracts are lined with squamous epithelium and may sequester to produce epithelial lined subcutaneous cysts or may become infected, leading to cellulitis or abscess. Common complaints were ear discharge, ear pain and swelling and they were mostly managed surgically. There are few reported cases of preauricular sinus abscess in the literatures hence the need to increase level of awareness.

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