

CASE REPORT

A Rare Case of Postauricular Fistula communicating with the Parotid Duct

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ABSTRACT

Embryological remnants of branchial clefts present as sinuses, cysts, and fistulae. They are usually encountered in the preauricular or postauricular area or high in the neck. Fistulas of the parotid gland are uncommon and result from either ductal or parenchymal injury. In this case report, we present a rare case of parotid fistula with postauricular opening. Fistulous tract was identified with sinogram and removed with 2 cm tract along with superficial parotidectomy.

Keywords: Branchial cleft anomalies, Sinogram, Superficial parotidectomy.

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INTRODUCTION

Embryological remnants of branchial clefts present as sinuses, cysts, and fistulae.¹ They are usually encountered in the preauricular or postauricular area or high in the neck. The most common cause of parotid fistula is trauma, followed by malignancy, operative complications (parotidectomy or rhytidectomy), and infection.² Fistulas of the parotid gland are uncommon and result from either ductal or parenchymal injury.

The most frequent etiologies are postoperative complication after parotid gland surgery and accidental trauma.³ The flow of salivary discharge from the fistula increases during food intake or mastication, confirming the diagnosis of the parotid fistula.

CASE REPORT

A 46-year-old female presented to our outpatient clinic with chief complaints of swelling behind the left ear for

the past 20 years. The swelling was initially small in size but gradually grew in size. About 6 years prior to presentation, the swelling burst spontaneously after which patient was having discharge from behind the ear (Fig. 1). The discharge was watery in nature and increased with food intake.

The patient had no history of trauma or surgery in the parotid region or pus discharge from the site. There was no history of ear complaints.

On examination, 0.5 × 0.5 cm opening was visualized in the postauricular region that could be probed inside indicating a sinus tract. Watery discharge was seen coming from the opening. The skin around the opening was scarred and loose. There was no palpable lymphadenopathy. Examination of the ear, oral cavity, and throat was normal.

Routine blood investigations were within normal range. Ultrasonography of neck was suggestive of a chronic sinus from the skin uniting with the Stensen's duct of left parotid. X-ray sinogram was suggestive of a cutaneous parotid duct fistula of the left parotid (Fig. 2).

The patient was taken up for surgical exploration of the sinus tract, and superficial parotidectomy was done for the patient. Fistulous tract was found to be extending from the skin to about 2 cm into the superficial lobe of left parotid. Parotid gland was normal in structure and texture. The fistulous tract was excised along with the superficial lobe of parotid. Postoperatively, the patient was discharged after suture removal on the 7th postoperative day. On subsequent follow-up, the wound region



Fig. 1: Clinical picture showing fistula

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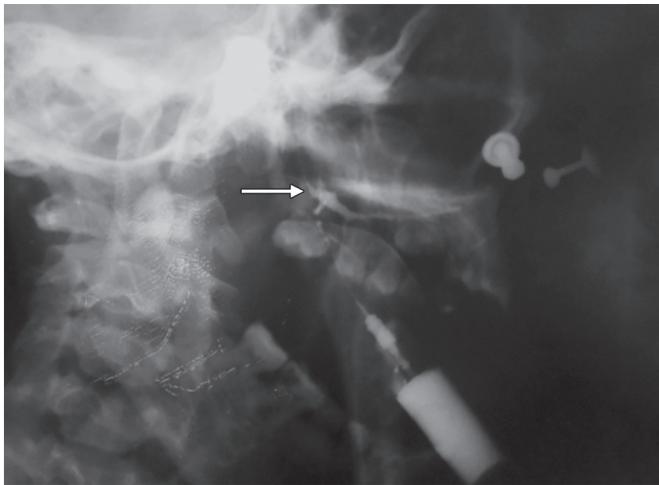


Fig. 2: Sinogram showing tract

was healthy and the patient had no further complaints. Histopathology report was suggestive of chronic sialadenitis of the parotid gland with inflammatory granulation tissue. Fistulous tract was not grossly identifiable.

DISCUSSION

First branchial cleft anomalies are of uncommon occurrence amounting to only 1 to 8% of all branchial cleft anomalies.⁴ They often present in the first two decades of life and may take the form of a cyst, sinus, or fistula presenting in front of or behind the pinna.⁵ The pinna develops from the fusion of hillocks of 1st and 2nd branchial clefts on either side. Failure of fusion of tubercles can lead to lesions either in front or behind the pinna. But almost all of the reported cases of 1st arch anomalies were found to be in the preauricular region.

Clinically, first arch anomalies present with repeated episodes of infection manifesting as cystic swellings or discharging fistulous openings either preauricularly or postauricularly, in the cheek, or high in the neck.

In conclusion, early diagnosis and treatment of branchial arch anomalies are needed to avoid recurrent infection and complication. Surgical exploration and excision is the definitive treatment. Surgery should only be undertaken when acute infective episode has cleared. Scarring due to repeated infection may cause difficulties with surgical dissection.

Other treatment modalities, like pressure dressing,⁶ low-dose radiotherapy, pharmacotherapy, botulinum toxin, transdermal scopolamine patches at sustained release (scopoderm transdermal therapeutic system),⁷ suppression of parasympathetic activity by the use of tympanic neurectomy,⁸ and hypertonic saline, have been tried with limited results.

REFERENCES

1. Siddiq MA. First branchial cleft anomaly presenting as a recurrent post-auricular abscess. *Emerg Med J* 2003 Jan;20(1):103-104.
2. Naragund AI, Halli VB, Mudhol RS, Sonoli SS. Parotid fistula secondary to suppurative parotitis in a 13-year-old girl: a case report. *J Med Case Rep* 2010;4:249.
3. Ananthakrishnan N, Parkash S. Parotid fistulas: a review. *Br J Surg* 1982 Nov;69(11):641-643.
4. Ford GR, Balakrishnan A, Evans JN, Bailey CM. Branchial cleft and pouch anomalies. *J Laryngol Otol* 1992 Feb;106(2):137-143.
5. Tucker AG. A case of post auricular sinus. *J Laryngol Otol* 1981 Jun;95(6):619-621.
6. Parekh D, Glezerson G, Stewart M, Esser J, Lawson HH. Post-traumatic parotid fistulae and sialoceles. A prospective study of conservative management in 51 cases. *Ann Surg* 1989 Jan;209(1):105-111.
7. Pagliuca G, Martellucci S, Rosato C, Gallipoli C, Gallo A. Posttraumatic parotid fistula treated with transdermal scopolamine: a case report. *Case Rep Surg* 2012;2012:Article ID 713148.
8. Davis WE, Holt GR, Templer JW. Parotid fistula and tympanic neurectomy. *Am J Surg* 1977 May;133(5):587-589.