Surgical Management of a Rare Case of Caruncle Sinus with Abscess

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Abstract

The lesions of the caruncle are extremely rare, which can arise from within the caruncle, its skin, hair follicles, sebaceous gland and accessory lacrimal glands, hence its clinical pre-operative diagnosis becomes very difficult to reach and is done only in 50% of the cases. The lesions of the caruncle are of a variety which includes nevus, benign tumours and rarely malignant tumours, which can be fatal. In this paper, we report a case of caruncle sinus with an abscess that was successfully managed by caruncle excision.

Keywords: Mucoid discharge, Caruncle fistula, Caruncle sinus, Caruncular excision.

INTRODUCTION

A caruncle is a small, pinkish, nodule structure that is present at the medial end of the palpebral fissure and inferomedial to the plica semilunaris, which contains accessory dermal appendages and sebaceous glands whose surface is covered by stratified squamous non-keratinised epithelium.¹

Lesions of the caruncle are rare, and the lesions developing from the caruncle are very diverse, making their clinical diagnosis very difficult.3 A few of the lesions are caruncle cyst, caruncle neoplasms, caruncle nevus and inflammation of the caruncle.⁴ Lesions can also be associated with systemic abnormalities like hyperthyroidism and neurofibroma.⁵ Caruncle Sinus, to the best of our knowledge, has not been reported earlier.

Case Report

A 34-year-old female hailing from a village in Jaunpur, Uttar Pradesh, presented with complaints of watering from her right eye with mucoid discharge for 12 years. She had consulted multiple doctors and had undergone multiple syringings in the past, which had proved to be patent.

The patient was examined under the slit lamp preoperatively and an opening was noticed on the caruncle itself, which was different from the punctal opening (Figure 1).

On careful examination, it was seen that mild serous fluid was coming out from the opening when the adjacent area was pressed. A diagnosis of caruncle fistula or caruncle sinus was

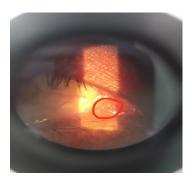


Figure 1: Showing the presence of an opening in the caruncle around the medial canthal area.

made. A Bowman's probe was inserted into the opening and it went inside up to 10 mm, after which a soft stop was felt.

The patient was advised to undergo caruncular excision with removal of the sinus. After giving local anaesthesia, a cannula was inserted in the track and fluid was injected (Figure 2).

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UP JOURNAL OF OPHTHALMOLOGY

An Official Journal of Uttar Pradesh State Ophthalmological Society, UPSOS (Northern Ophthalmological Society, NOS)

p-ISSN: 2319-2062 DOI: 10.56692/upjo.2025130208 How to cite this article: Subramanian S, Chandra A, Khalkho G, Dixit A, Singh S. Surgical Management of a Rare Case of Caruncle Sinus with Abscess. UP Journal of Ophthalmology. 2025;13(2): 74-75.

Received: 08-06-25, Accepted: 24-06-25, Published: 26-08-25



Figure 2: Showing a cannula inserted in the track and fluid was injected

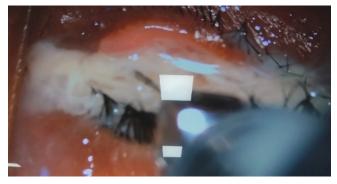


Figure 3: Showing a Stream of pus flowing after a probe was inserted into the track



Figure 4: Showing the excision of the caruncle

A gush of pus was seen gushing out of the tract, which was sent for microbiological investigation (Figure 3).

Once the pus was drained, the caruncle, along with the sinus, was opened up in a flower-like fashion, then excised with the help of scissors (Figure 4).

After the caruncle was excised, the conjunctivae of either side were approximated towards each other and sutured with 8-0 vicryl. On post- op day 1, the patient was examined under diffuse torch light and under slit lamp and there was no inflammation or discharge seen in that area. The patient was seen at regular intervals on days 7, 30, and 90, but the patient had no complaints. There was no watering or mucoid discharge for which the patient had been suffering for 12 years.

Discussion

This case of a caruncle sinus is a unique case and, to the best of our knowledge, has not been reported earlier. Excision of the caruncle with the sinus was the definitive treatment in this case. Few other lesions of the caruncle have been reported and published in the literature.

Yuta Okumura et al. described a case of bilateral caruncular lesions with a history of p-ANCA-positive interstitial pneumonia. About 6 months post-treatment for interstitial pneumonia, the patient had noticed a mass growing on both sides of the medial canthus, with a size 10 x 4 mm on the right side and 10 x 6 mm on the left side. The surface was smooth and had a papilloma-like extrusion over the swelling of the left eye.⁵

Miura-Karasawa M et al. reported a case of sebaceous gland hyperplasia of the lacrimal caruncle, which was later established as a papilloma of the caruncle. The tumour was attached to the medial canthus of the left eye, resected and sent for histopathology, which revealed a "navel-like structure". The apical portion of the tumour was a papillomatous lesion with the organism being human papilloma virus—51 detected by in-situ hybridisation.³

Ishikawa E et al. reported a case of a caruncular nevus with papilloma on a 39-year-old female who developed a progressively enlarging left caruncular lesion.⁴

Takahashi Y et al. reported a case of lymphoid hyperplasia of both the caruncles, one on an 11-year-old child and another on an 80-year-old woman.⁵

Conclusion

There were many studies done and published about caruncular lesions, such as a papilloma, nevus, lymphoproliferative disorders, or a lymphoid hyperplasia of the caruncle. This case of a caruncle sinus is a first case report and complete excision of the caruncle with sinus would be the definitive treatment in such a case.

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