CASE REPORT

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Conjunctival lymphangiectasia: A case report

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ABSTRACT

In this article, a 51-year-old man with conjunctival lymphangiectasia who applied to the hospital with conjunctival swelling was presented. Conjunctival resection of lesion was performed and no recurrence was found in the follow-up examination at 9 months. This is an uncommon clinical condition in which conjunctival swelling occurs as a consequence of enlarged lymphatics of the bulbar conjunctiva.

Key Words: Resection of conjunctival, chemosis, lymphangiectasia

Introduction

Lymphangiectasia is a swelling of the conjunctiva caused by enlarged lymphatics (1). Although an exact cause for this rare condition is unknown, it is likely that result of obstruction of the lymphatic ducts. Generally, patients may have blurred vision, lacrimation, and ocular discomfort. The disorder often resolves spontaneously, but conjunctival resection of this lesion is a suitable treatment option when necessary. A rare case of lymphangiectasia is presented in this report.

Case report

A 51-year-old man applied to the ophthalmology outpatient clinic complaining of pain, redness and swelling of the left eye, which had lasted for 6 months. In this time, he had previously consulted with several ophthalmologists. Although he was given steroid eye drops, his complaints had not completely resolved. He had no considerable history of surgery, trauma, or irradiation.

The best-corrected visual acuity was 20/20 in the right eye (with –0.75@60°) and 20/20 in the left eye (with no correction). Intraocular pressure was measured as 12 mm Hg in both eyes.

In slit-lamp biomicroscopy of the left eye, a hyperemic cystic lesion was observed in the temporal bulbar conjunctiva (Figure 1). The anterior segment was normal in the fellow eye. Fundus examination was normal in both eyes.

Axial globe position was measured as 18 mm in both eyes by Hertel exophthalmometer. Orbital magnetic resonance imaging findings and thyroid function tests and were normal. Tear break-up time was measured as 17 seconds in the right eye and 18 seconds in the left eye. Schirmer's test evaluated as 15 mm in the right eye and 16 mm in the left eye after 5 minutes. Surgery was planned with diagnosed conjunctival lymphangiectasia in the patient.

Conjunctival resection of lesion was performed under local anesthesia in the left eye of the patient. The open conjunctival tissue was closed with 8/0 Vicryl suture. Pathological material was identified as conjunctival lymphangiectasia (Figure 2). The patient's complaints resolved over follow up, and no recurrence was found in the follow-up examination at 9 months (Figure 3).

Discussion

Conjunctival lymphangiectasia, which is characterized by abnormal diffuse enlargement of the lymphatic vessels, is a rare condition. It appears clinically as chemosis. Localized, enlarged lymphatics appear clinically as cysts (2). A pinguecula, an old scar, or some other conjunctival lesion usually obstructs localized lymphatics, dilatation may occur secondarily. However, sometimes the main cause is unknown. We could not find any noticeable etiological cause in our case. Although lymphangiectasia frequently improves spontaneously, sometimes the conjunctiva is chronically swollen, and this may induce tear film impairment. Optical coherence tomography (OCT) might also be beneficial in the diagnosis of conjunctival lymphangiectasia (3). Direct surgical excision to the affected conjunctiva is an appropriate treatment option, although various treatment

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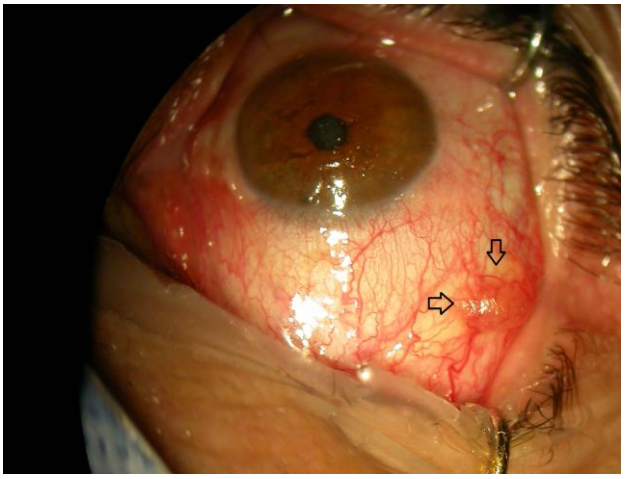

Fig. 1. Preoperative appearance of the left eye. Arrows indicate the conjunctival swelling.

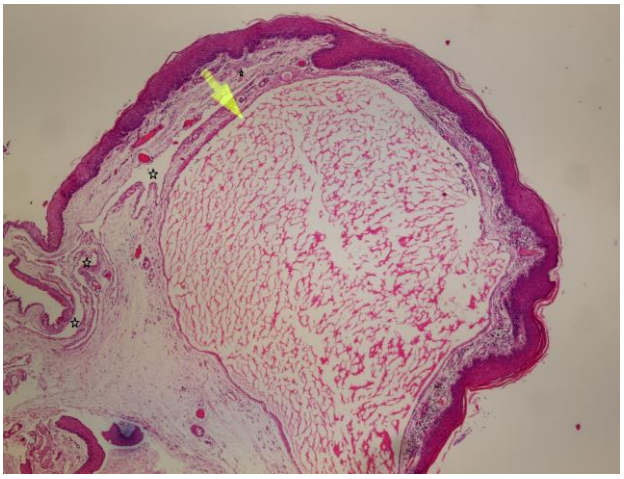

Fig. 2. Histopathological image shows hyperkeratosis and squamous metaplasia of the surface mucosa, marked edema of the lamina propria and stroma, and dilated lymphatic channels (asterisks and arrow; HE&40).

Fig. 3. No recurrence was observed 9 months after surgery.

strategies have been applied in the literature (4-7). We performed direct surgical lesion excision in this case, and no recurrence was observed after 9 months of follow-up. Welch et al, reviewed literature, they presented 11 cases of conjunctival lymphangiectasia proven pathologically (8). All cases underwent surgical excision of the involved conjunctiva with no graft (6 of 11 cases), combined with amniotic membrane transplant (3 of 11 cases) and combined with conjunctival autograft (2 of 11 cases). Tan et al. used subconjunctival bevacizumab for treatment of conjunctival lymphangiectasia in a case (9). Patient's symptoms had fully resolved and they did not observe any recurrence of lesion at 3 years follow-up.

Lymphangiectasia can often be confused with other factors leading to conjunctival swelling, such as edema, trauma, infection and previous periocular surgery. Conjunctival swelling may occur because of increased hydrostatic pressure due to excessive fluid loading, resolution of obstruction resulting from thyroid eye disease, increased osmotic pressure associated with orbital tumor, or hypoproteinemia (10). Conjunctivochalasis can be considered for differential diagnosis, but this can be clearly distinguished with age-related, loose connections and excessive conjunctival tissue. Conjunctivochalasis is treated with conjunctival resection (11).

Ophthalmologists should consider in the differential diagnosis of conjunctival swelling and redness. If conjunctival lymphangiectasia is diagnosed, surgical lesion resection is the appropriate choice for treatment.

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