

Idiopathic Subconjunctival Abscess

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Subconjunctival abscess is a relatively rare cause of ocular infection. It is usually associated with predisposing factors such as previous trauma or surgery. We report a case of subconjunctival abscess in a 61-year-old woman with no known risk factors. The subconjunctival abscess resolved completely after surgical excision and treatment with topical ciprofloxacin. The final vision preserved 20/20. (*Chang Gung Med J* 2004;27:555-7)

Key words: subconjunctival abscess.

Subconjunctival abscess is a relatively rare cause of ocular infection. It usually occurs in eyes with predisposing factors such as previous trauma or surgery.⁽¹⁻³⁾ We present a case of subconjunctival abscess, documented by culture and pathology, in a patient with no previously reported risk factors.

CASE REPORT

A 61-year-old woman presented to our clinic with mild discomfort in the right eye. There was no

history of ocular trauma or surgery; she denied having any systemic diseases, alcoholism, drug addiction or use of immunosuppressive drugs, topical antibiotics or corticosteroids. At presentation, her right eye vision was 20/20. Slit-lamp examination revealed a well-defined, yellowish nodule underlying a primary pterygium with mild congestion (Fig. 1). Other ocular findings were unremarkable. A diagnosis of nodular episcleritis was made and prednisolone acetate 1% was given 4 times a day. Four days later, the nodule became larger. Laboratory investigations

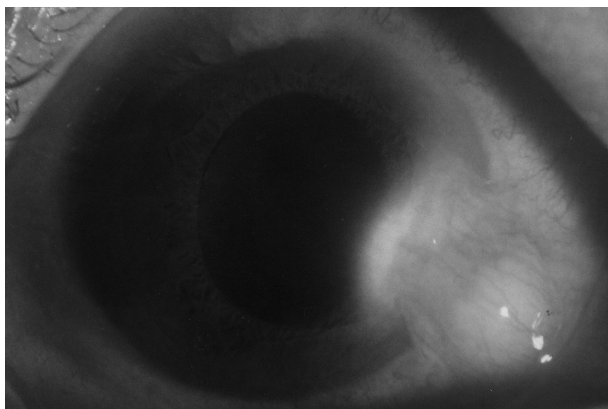


Fig. 1 A well-defined, yellowish nodule underlying a primary pterygium is seen.



Fig. 2 The wound has healed well in the bare sclera area 2 months after surgery.

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including complete blood count, erythrocyte sedimentation rate, antinuclear antibody, rheumatoid factor, chest X-ray and urinalysis were normal. Infection was suspected and the patient underwent surgical intervention. After the pterygium was excised, a well-defined, localized subconjunctival nodule with purulent discharge was found and excised. Ciprofloxacin 0.3% 6 times per day was prescribed postoperatively. Cultures from pus yielded moderate growth of *Haemophilus influenzae* sensitive to chloramphenicol, ceftriaxone and cefuroxime, but resistant to ampicillin, and sulfamethoxazole-trimethoprim. The pathology report revealed fragments of necrotic debris with abscess formation. The wound healed well (Fig. 2) and no recurrence or visual impairment was found during the 1-year follow-up.

DISCUSSION

A subconjunctival abscess is usually associated with risk factors such as trauma or surgery,⁽¹⁻³⁾ and is a relatively rare cause of ocular infection. Most previously reported cases occurred in patients with infectious scleritis after pterygium excision⁽²⁾ or strabismus surgery.⁽³⁾ Two cases of subconjunctival abscess without history of trauma or surgery have been reported previously.^(4,5) Maskin presented a diabetic patient with infectious scleritis. The patient's culture report was the same as that from the patient's foot ulcer. Maskin speculated that the scleritis was probably due to self-inoculation from the foot.⁽⁴⁾ Hwang and colleagues reported a case of a scleral nodule in a patient treated with immunomodulators—the only possible risk factor for infection.⁽⁵⁾ There were no known predisposing factors in our patient. However, minor trauma or subclinical inflammation that the patient did not recall can not be completely ruled out.

We initially treated this case as idiopathic nodular episcleritis, but the nodule enlarged after steroid treatment. In this circumstance, excisional biopsy is the best option for diagnosis and treatment. We made the diagnosis of subconjunctival abscess during

surgery because of lack of scleral involvement. Since early drainage can prevent scleral necrosis, the patient was not placed on intensive systemic treatment as usual in patients with infectious scleritis. Infection with *Haemophilus influenzae*, a rare pathogen in infectious scleritis, has been reported in only 3 patients, all of whom had histories of ocular surgery such as cataract extraction and strabismus surgery.⁽⁶⁾ Impairment in opsonization is a well-known predisposing factor to infection with encapsulated bacteria such as *Haemophilus influenzae*. We were not able to identify whether the pathogen was endogenous or exogenous in this case. Whether the pterygium had some influence on abscess formation is unclear.

We were unable to find any other cases of subconjunctival abscess without predisposing factors in the English language literature. This case demonstrates that microbial infections may imitate autoimmune processes, even though there may be no clues to implicate the infection. Thus, to prevent serious complications and sequelae, aggressive treatment with surgical debridement should be performed once an infectious process is suspected.

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原發性結膜下膿瘍

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結膜下膿瘍是很罕見的眼部感染，它通常發生於之前有接受過眼科手術或外傷的病人身上，在這篇文章中，我們報告一個由細菌培養及病理報告證實為一結膜下膿瘍的病人，但卻無法找到可能相關的危險因子。此病人結膜下膿瘍在手術切除及抗生素治療，視力仍維持20/20。(長庚醫誌 2004;27:555-7)

關鍵字：結膜下潰瘍。

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