

Case Report

Bilateral blindness due to pterygium: a case report

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ABSTRACT

Although known to cause refractive visual disturbances at some stages, pterygium rarely leads to blindness especially where eye care services are available. This case report presents a 56 year old farmer with advanced pterygia. She reported to the eye clinic after several years of unsuccessful self-medication and refusal to accept an earlier offer of surgical treatment due to fear of surgery. The patient subsequently had surgical excision of both pterygia with visual restoration. The importance of meticulous counseling and health education on the incidence of needless blindness is emphasized.

Keywords: Pterygium, Bilateral, Blindness, Eye care

INTRODUCTION

Pterygium is a triangular or winged shape fibrovascular proliferation on the conjunctiva with a potential to encroach on the cornea. It occurs at the interpalpebral conjunctiva on its temporal or nasal side but commonly seen on the nasal conjunctiva. Its growth can be progressive, stationary, atrophic or inflammatory giving rise to its various clinical forms. Either or both eyes can be affected with varying degrees of asymmetry. Pterygium is worldwide in distribution but found to be commoner in hot dry climates.¹ The prevalence is as high as 22% in equatorial areas and less than 2% in latitude above 40°.²

The aetiology of pterygium is currently not clearly understood. However, a number of risk factors have been identified. It has been found that there is a 44 fold greater risk of developing pterygium among persons working in sandy, outdoor environment, and 9 fold increases in patients who do not use sunglasses and a 2 fold relative risk in those who never wear a hat.³ Thus, there is a significant association between ultraviolet light exposure

(UV - A and B) and the development of pterygium.⁴ Pterygium has equal incidence in both sexes but its incidence increases with age with highest incidence occurring between the ages of 20 and 49 years.^{2,5}

Treatment of pterygium is rarely necessary except when it causes visual effects or is inflamed at which time topical steroids, vasoconstrictors and adjuvant surgical therapy may be required. Pterygium can lead to blindness when neglected over a long time. However, this situation is uncommon except in situation of poverty, poor awareness of availability of care, poor access to care and fear of surgery.

We herein report a case of bilateral blindness due to pterygium in a middle aged farmer.

CASE REPORT

A 56 year old farmer presented at our eye clinic with complaint of progressive gradual fleshy growth in both eyes associated with diminished vision of 10 years duration. Prior to presentation, she used to have foreign

body sensation and occasional redness of the eyes of which she used to obtain relief by applying chloramphenicol eye drops bought from local stores.

Few years after the onset of the growth, she visited a private eye clinic where she was offered surgical treatment of her condition but she declined on account of fear of surgery. Patient had remained without treatment until her vision deteriorated to a level that common visual task became difficult. At that point she was brought to the eye clinic by her daughter.

She is married with 10 children. She is a member of a polygamous family of 17 children. No history of pterygium in her family and also among the children. She has never used spectacle and does not frequently use hat on her way to or while working in the farm. She is not a known hypertensive, diabetic or suffering from any systemic disease.

Examination revealed a visual acuity of hand motion in both eyes associated with advanced binasal pterygia obstructing both visual axes. The anterior chamber and other parts of the intraocular structures were not visualized. She was counseled for pterygia excision and subsequently had excision of both pterygium using bare sclera technique with 5 fluorouracil (5 Fu) Dab as adjuvant at two weeks interval between both eyes. The excision of both pterygia revealed a residual cornea haze in both eyes at the beds of the pterygia. Histopathological report on the excised specimens from both eyes confirmed bilateral pterygium (Figure 1). At follow up, her visual acuities improved to 6/36 in both eyes.

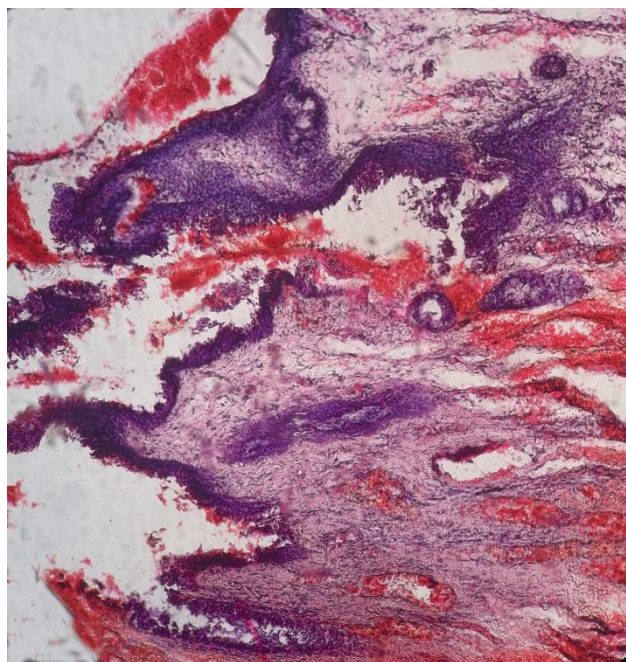


Figure 1: Photomicrograph of pterygium showing benign stratified squamous epithelium with loose and pale subepithelial conjunctiva, congested blood vessels and areas of haemorrhage (H & E, x100).

DISCUSSION

Although, known to cause visual impairment as a result of its effect on the refractive status⁶ of the eye, pterygium rarely causes blindness⁷ especially where eye care services are available. This patient presented earlier in a private eye care facility where she was advised to undergo surgery which she declined out of fear. This case report illustrates the contribution of fear of surgery to the incidence of needless blindness in our society.⁸ A great deal of health education is therefore needed in this regard.

A number of risk factors clearly put this woman at risk of development of pterygium. Her occupation (farming) dusty environment and the habit of not wearing hat in a sunny climate and where she resides clearly put her at increased risk of development of pterygium.⁹ These factors may be responsible for the development of pterygium in this patient.

Pterygim excision done with adjuvant therapy is known to reduce the risk of recurrence.¹⁰ This patient had excision (bare sclera technique) with 5-Fluorouracil as adjuvant leading to restoration of her vision.

This report therefore highlights a case of needless blindness as result of fear of surgery, validating the fact that fear of surgery is an important barrier to uptake of surgical services in our environment.

CONCLUSION

Blindness due to pterygium is uncommon especially where eye care services are readily available but factors such as fear of surgery among others may increase its incidence. Health education is therefore needed especially in our local communities in order to curb this.

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