

TERRIEN'S MARGINAL DEGENERATION

(Case Report)

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Introduction

Terrien's marginal degeneration is a rare bilateral condition starting with opacification and vascularisation of the periphery of the cornea progressing by degeneration of the stroma to the formation of a gutter and finally resulting in ectasia with seventy five percent of the patients being males and two thirds being older than 40 years [1].

CASE REPORT

A 70-year-old male presented with painless gradually progressive diminution of vision in the right eye of more than two years duration. There was no history of redness, watering, pain or photophobia in either eye and the patient was otherwise ocularly asymptomatic. Visual acuity of the right eye was 1/60 with accurate projection and that of the left eye 6/18 improving to 6/9 with 1.0 D Sph. There was no ocular deviation. Examination of the right eye revealed a lustrous central cornea with a circumferential thinning of the peripheral cornea into a gutter (Fig 1). There was a clear margin of uninvolved cornea which separated the gutter from the limbus. The gutter had a vascularized base with a steep sharp central margin in the form of a white line and a gradually sloping

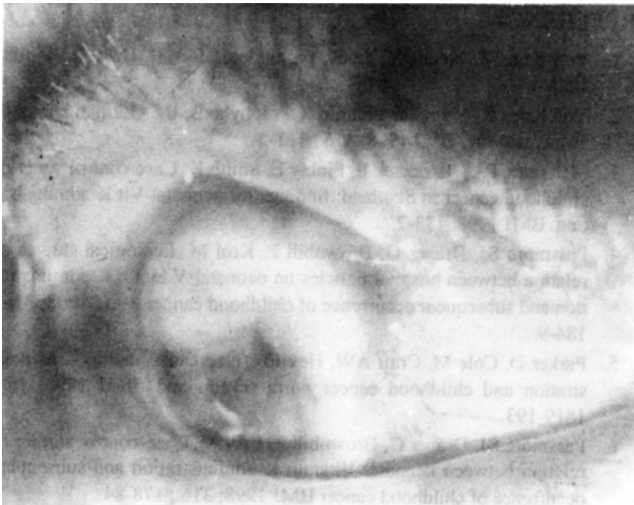


Fig. 1 : Terrier's marginal corneal disease

outer margin. The gutter was more broad superiorly and inferiorly and was covered by intact epithelium as there was no fluorescein staining. The lens showed a nuclear and a posterior subcapsular cataract. Keratometry revealed a K₁ of 52.0 D and a K₂ of 52.5 D. Haag-Streit optical pachymetry on the slit lamp gave an anterior chamber depth of 3.25 mm (N=2-3 mm), a central corneal thickness of 0.52 mm (N=0.49-0.56 mm) and a peripheral corneal thickness of 0.46 mm (N 0.7-0.9mm). The patient was deduced to have a corneal bowing due to the high K readings and deep anterior chamber. Applanation Tonometry gave an intra-ocular pressure of 16 mm Hg and the fundus could not be visualized due to the lenticular opacification.

The left eye had a corneal picture similar to the one seen in the right eye with the only difference that the gutter was shallow and present only superiorly and inferiorly. The cataract in the left eye was also less immature and examination of the fundus revealed a normal optic disc, macula and retinal periphery.

The case was, therefore, that of a bilateral peripheral corneal degeneration with immature senile cataract right eye. The absence of pain and fluorescein uptake along with bilaterality excluded the diagnosis of Mooren's ulcer while the superior involvement along with vascularization excluded a Pellucid degeneration. The asymptomatic bilateral affection in an elderly male with superior and inferior corneal involvement along with vascularization and non fluorescein uptake clinched the diagnosis of Terrien's marginal corneal degeneration.

Discussion

Terrien's marginal corneal degeneration is a rare clinical entity. (Only 133 cases have been reported by Duke Elder [1] and the same has also been highlighted by Paul Austin and Stuart I Brown [2]. It is surprising how a serious condition with a dangerous potential for perforation can progress asymptotically and that too bilaterally.

REFERENCES

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