PRESENTATION OF CASE
Terrien’s Marginal degeneration is a rare corneal degeneration which is usually more common in males and is bilateral, although asymmetrical. We would like to report a rare case of unilateral Terrien’s marginal degeneration in a young female (Figure 1).

A 23 yrs. old female presented to our Institute with complains of diminution of vision and pricking sensation of right eye since 2 years. No history of redness, pain or trauma to the eye has been reported.

On ocular examination, best corrected visual acuity in right eye was 6/12 with -4.00 DS and 6/6 in left eye.

Anterior segment examination of the right eye showed fine white refractile stromal opacities associated with superficial vascularization in the superior cornea extending from 10 ‘O’ clock to 2 ‘O’ clock position, separated from the limbus with clear zone. The affected cornea was thinned out. No epithelial defect was present. Rest of the anterior segment was normal.

Left eye was within normal limits. Her central corneal thickness measured using ultrasonic pachymetry was 543 microns and 530 microns in the right and left eye, respectively.

Corneal topography showed flattening along the vertical meridian and high irregular corneal astigmatism in the right eye.

Systemic examination and investigation revealed no other abnormalities.

She was treated symptomatically with lubricating drops and protective glasses. Further, advised for regular follow-up to monitor progression of the disease.

CLINICAL DIAGNOSIS
Terrien’s Marginal Degeneration

DIFFERENTIAL DIAGNOSIS
• Mooren’s Ulcer
• Peripheral Ulcerative Keratitis
• Dellen
• Ocular Rosacea
• Furrow Degeneration

PATHOLOGICAL DISCUSSION
Terrien’s marginal degeneration (TMD) is a slow-progressing, bilateral but asymmetric and ectatic corneal atrophy, was first demonstrated in 1990 by Terrien.¹

Todd Reabody et al.² suggested that the condition is most commonly seen in males past the age of 40 yrs. Initially, TMD starts as small, yellow-white, stromal opacities which are composed of lipids. It is associated with some superficial vascularisation. The changes begin superiorly and spreads circumferentially. As the disease progresses, a gutter forms in the affected area due to stromal thinning. The epithelium above the affected area is intact.³

The condition is usually bilateral but asymmetric. The condition is often asymptomatic. Perforation of the cornea can occur but is rare. Perforation can occur spontaneously or following a minor trauma. Patients may complain of mild irritation or vision deterioration which is due to astigmatism.
Astigmatism is usually against the rule or oblique astigmatism. Patients are typically 20-40yrs of age, although it may present in childhood. It is found more commonly in men than in women (3:1). According to Mayor Yanoff and Jay.S.Duker, Terrien’s degeneration typically begins peripherally and superiorly. It manifests initially as mild, punctate subepithelial and / or anterior stromal opacities. It is separated from the limbus by a clear zone. This opacification is associated with mild superficial vascularisation which is seen as development of a peripheral, superficial, fine vascular pannus, which progresses over years to include a linear sub-epithelial opacity at the advancing edge. The thinning begins slowly between the limbus and the line of lipid deposition. Typically, a steeper sloping of the cornea occurs at the advancing edge. The central wall is steep and the peripheral wall slopes gradually. The thinning progresses circumferentially and may rarely involve inferior cornea. The epithelium overlying the lesion typically remains intact. Up to one-third of patients may have episcleral or scleral inflammation. Perforation is rare.

The patient in our case report also presented to us with similar findings.

**DISCUSSION OF MANAGEMENT**

The diagnosis of the condition is mainly clinical. Irregular corneal astigmatism from progressive flattening of the vertical meridian and high against-the-rule astigmatism is characteristic. This can be confirmed with corneal topography. Thus, examination of corneal topography is helpful in establishing the diagnosis of TMD. Corneal topography mapping can help in confirming the diagnosis, provide information on the corneal curvature and magnitude and axis of astigmatism and is also useful to monitor the progression of the disease.

The course of the disease is slowly progressive. Usually no treatment is required, unless perforation or impending perforation occurs. Severe astigmatism may be managed with spectacles or rigid contact lenses. If the thinning is severe, keratoplasty may be required. Keratoplasty could be either crescentic, full-thickness, or lamellar keratoplasty.

**FINAL DIAGNOSIS**

Terrien’s Marginal Degeneration

**REFERENCES**