

Clinical Bulletin

Association of Keratoconus With Granular Corneal Dystrophy

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A 23-year-old woman presented with a history of reduced vision and foreign body sensation in both her eyes. Ocular examination revealed the simultaneous presence of bilateral keratoconus and granular corneal dystrophy. To our knowledge, bilateral concurrent occurrence of keratoconus and typical granular corneal dystrophy has not been reported previously. In such a case, penetrating keratoplasty performed for keratoconus may also carry the risk of recurrence of the granular dystrophy.

Among many theories postulated, abnormal synthetic activity of keratocytes and degeneration of defective basal epithelial cells have been speculated to occur in both granular corneal dystrophy and keratoconus.^{5,7}

While penetrating keratoplasty enjoys a high success rate in keratoconus, granular corneal dystrophy is known to recur within the donor cornea⁸⁻¹⁰ and may compromise the result of an otherwise successful corneal graft.

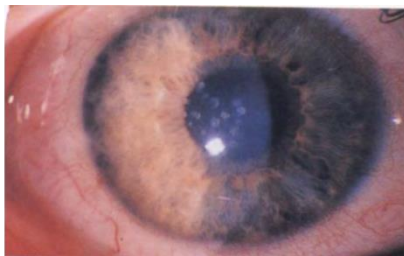


Figure 1 Slit-lamp photograph of the left eye showing granular corneal opacities

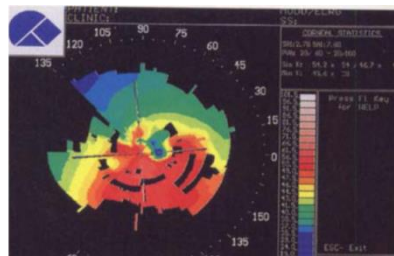


Figure 2 Corneal topography of the left eye showing marked inferior steepening.

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