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OCULAR DISEASE

CORNEAL OPACITIES



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CORNEAL OPACITIES

- The word '*corneal opacification*' *literally means loss* of normal transparency of cornea, which can occur in many conditions.
- Therefore, the term '*corneal opacity*' *is used particularly for the loss of* transparency of cornea due to scarring.



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Causes

1. Congenital opacities may occur as developmental anomalies or following birth trauma.
2. Healed corneal wounds.
3. Healed corneal ulcers.



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Clinical features

Types of corneal opacity:

1. *Nebular corneal opacity.*
2. *Macular corneal opacity.*
3. *Leucomatous corneal opacity.*
4. *Adherent leucoma.*
5. *Corneal facet.*
6. *Kerectasia*
7. *Anterior staphyloma*



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Nebular corneal opacity

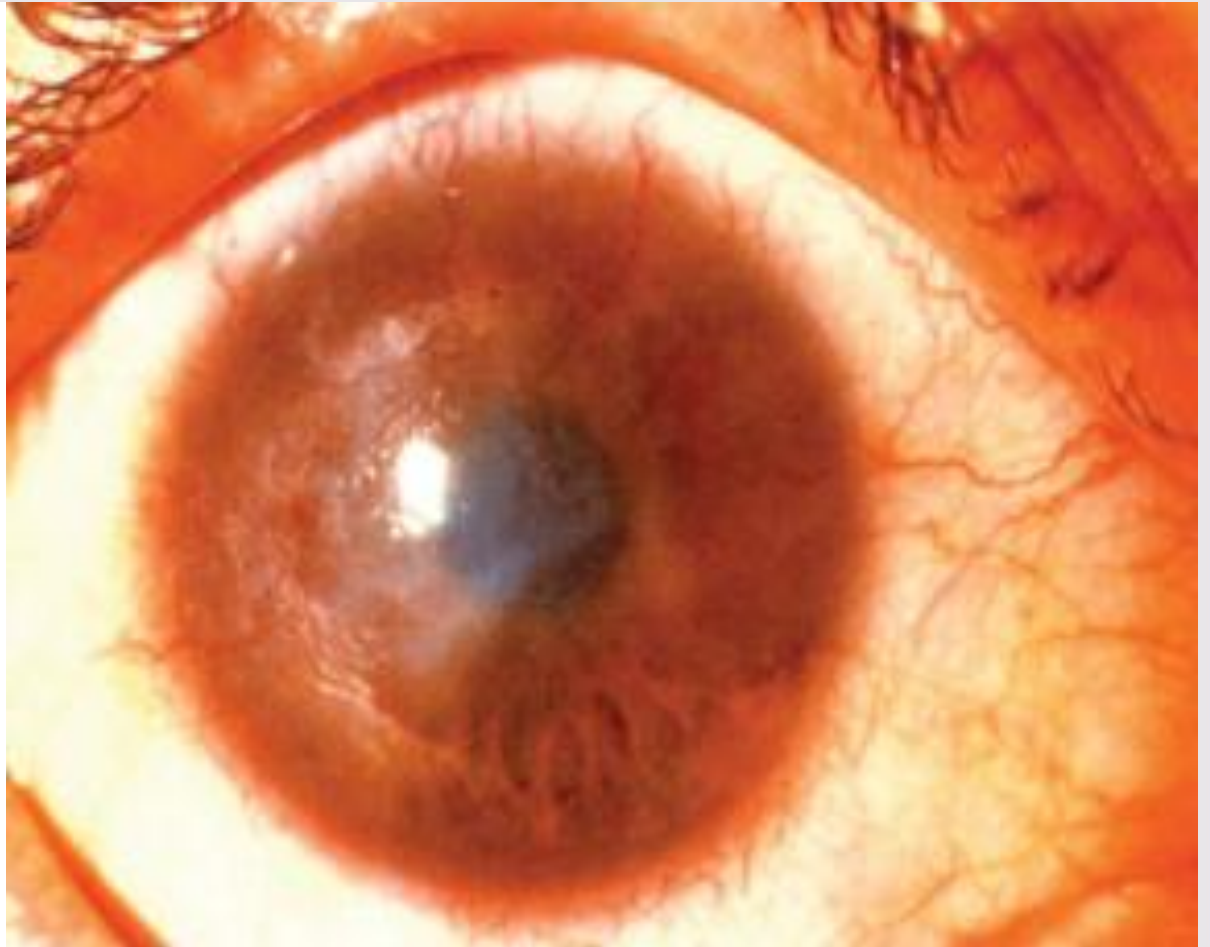
- It is a faint opacity which results due to superficial scars involving Bowman's layer and superficial stroma.
- A thin, diffuse nebula covering the pupillary area interferes more with vision than the localised leucoma away from pupillary area.
- Nebula produces blurred image and irregular astigmatism



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Nebular opacity



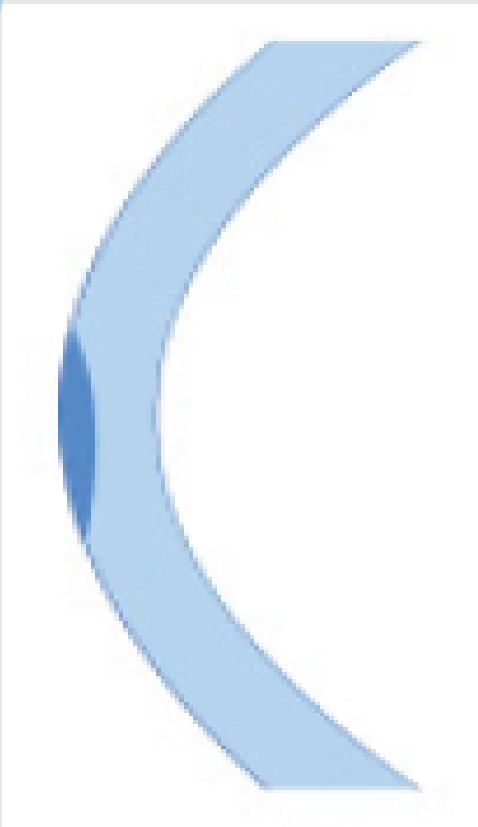


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Macular corneal opacity

- It is a semi-dense opacity produced when scarring involves about half the corneal stroma





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Leucomatous corneal opacity

- It is a dense white opacity which results due to scarring of more than half of the stroma





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Adherent leucoma

- It results when healing occurs after perforation of cornea with incarceration of iris





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Corneal facet and Kerectasia

- **Corneal facet** : corneal surface is depressed at the site of healing such a scar is called facet.
- **Kerectasia**: In this condition corneal curvature is increased at the site of



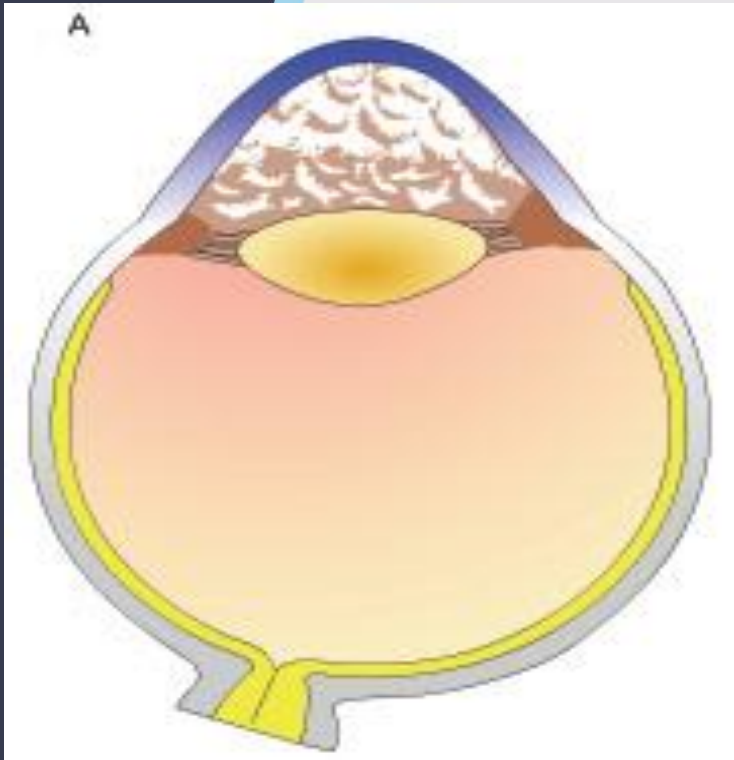


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Anterior staphyloma

- An ectasia of psuedocornea which results after total sloughing of cornea, with iris plastered behind it is called *anterior staphyloma*





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Treatment

1. **Optical iridectomy:** *It may be performed in cases with central macular or leucomatous corneal opacities, provided vision improves with pupillary dilatation.*
2. **Keratoplasty:** *provides good visual results in uncomplicated cases with corneal opacities.*
3. **Phototherapeutic keratectomy (PTK):** *performed with excimer laser is useful in superficial (nebular) corneal opacities.*



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4. Cosmetic coloured contact lens:

gives very good cosmetic appearance in an eye with ugly scar having no potential for vision.