



Case Report

Fuchs Dystrophy

Authors

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Chief Complaints

A 60 year old patient resident of Badwani, labourer by occupation presented with chief complaints of diminution of vision in both eyes (LE > RE) since childhood

History of Presenting Complaint

- Patient was apparently alright till 10-15 years of age, then he started experiencing diminution of vision in both eyes (le>re) which was gradual in onset, painless and progressive in nature, associated with photophobia, on and off headache and development of slight haziness of cornea.
- No h/o coloured halos, floaters, diplopia, itching.
- No h/o any previous trauma or foreign body sensation.
- No h/o any episode of congestion and pain in either of the eye.
- No h/o diminution of vision more pronounced on awakening.

Past History

h/o development of joint deformity in wrist and carpometacarpal joints at 45 years of age which was gradual in onset painless and not associated with any other systemic illness.

Personal History

Diet- vegetarian, appetite normal, sleep normal, bowel and bladder habit normal, no history of drug allergy.

Family History

No history of similar complaints in family.

Drug History

Patient was on eye drop hypersol 5 times a day since past 1 month.

General Examination

- Average built
- Conscious, oriented to time, place, person
- Afebrile
- Pulse – 85/min, BP – 130/90
- RR – 16/min
- No pallor, icterus, cyanosis or clubbing and lymphadenopathy
- Resp system – WNL
- CVS – wnl
- Per abdomen – wnl
- CNS – no neurological deficit

Ocular Examination of RE

- Vision – CF at 1 foot PR accurate in all quadrants

- Position of head = normal
- Position of eyeball = central
- Ocular movement = present in all cardinal gazes
- Lids = mildly swollen
- Lacrimal passage = ROPLAS negative
- Conjunctiva = congested

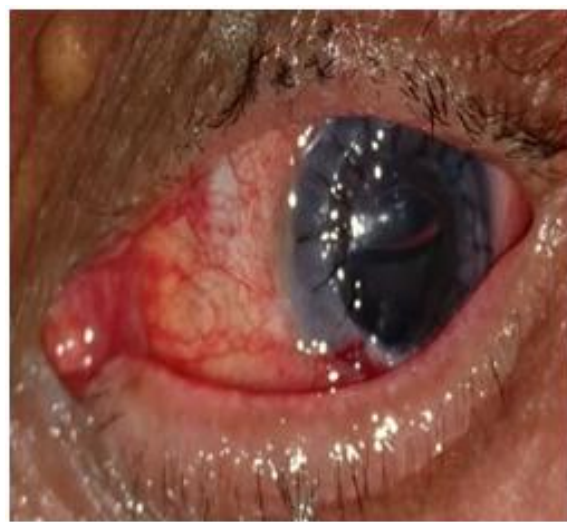
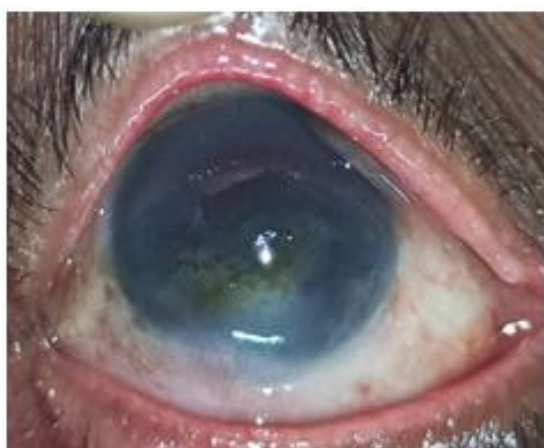
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Cornea

- Shape - normal
- Size – 10.5 mm (vt) X 11 mm (hz)
- Curvature - normal
- Thickness – increased
- Sheen – dull
- Transparency – Lost in central and inferior half of cornea due to multiple small greenish yellow homogenous spherules of varying sizes present in the area of palpebral fissure occupying subepithelial space and superficial stroma.
- Surface – irregular.
- Vascularization -absent
- Deposit – present
- Encroachment from limbus - none
- Corneal sensation – can't be elicited due to photophobia.
- Fluorescein staining –positive (punctate staining in the centre)

LE Cornea

- Graft cornea = Size- 8 mm mildly hazy in central area due to edema and Descemet's folds
- Host cornea = mildly edematous.
- Graft host junction - edema
- 16(10-0) interrupted sutures present.
- Knots exposed at 3,4,5 and 9'o clock. .
- Shape – normal (horizontally oval mires due to astigmatism)
- Curvature – normal
- Thickness – normal in central area, increased G-H junction due to edema.
- Sheen – dull
- Transparency – decreased due to edema and Descemet's folds
- Surface – regular



Ocular Examination of LE

- Vision – CF at 1 foot PR accurate in all quadrants
- Position of head = normal

Vascularization - Absent

- Deposit – absent
- Encroachment from limbus – absent
- Corneal sensation- not reliable
- Fs staining – negative
- Sclera – normal

- Anterior chamber – formed, air bubble present.
- Iris – normal color
- pattern- not appreciable
- Pupil – mid dilated non reacting to light
- Lens – shining reflex
- Tension – Digitally normal

Fundus BE

- Media – Hazy (due to hazy cornea in RE & air bubble in LE)
- Red glow present
- Rest details not appreciable

Investigations

- Hb-15.5 gm%
- TLC-16,300/cumm
- DLC-P52,L40,M05,E03,B00
- Platelets-2.4lac/cumm
- RBS -99 mg/dl
- Blood urea 21 mg/dl
- Creatinine 1.24 mg/dl
- USG B scan BE – wnl
- CCT- error

Probable Diagnosis

- BE eye corneal dystrophy which may be due to-
 - Fuch's endothelial corneal dystrophy
 - CHED

With

- RE spheroidal degeneration with SIMC.
- LE eye post keratoplasty with pseudophakia.

Treatment

- Locally Left eye
- e/d moxifloxacin 0.5% hrly
- e/d prednisolone acetate 1% hrly
- e/d homatropine 2% bd
- e/d iotim 0.5% bd
- e/olacrigelhs.

Conclusion

For many years, the only option for patients with visually significant Fuchs' dystrophy was a full thickness corneal transplant or penetrating keratoplasty (PKP). The advantage of a full thickness corneal transplant is that it can restore vision even in the most advanced stages of Fuchs' dystrophy.