

#### Título: Rare and Unusual Cases Involving the Cornea - Sclera

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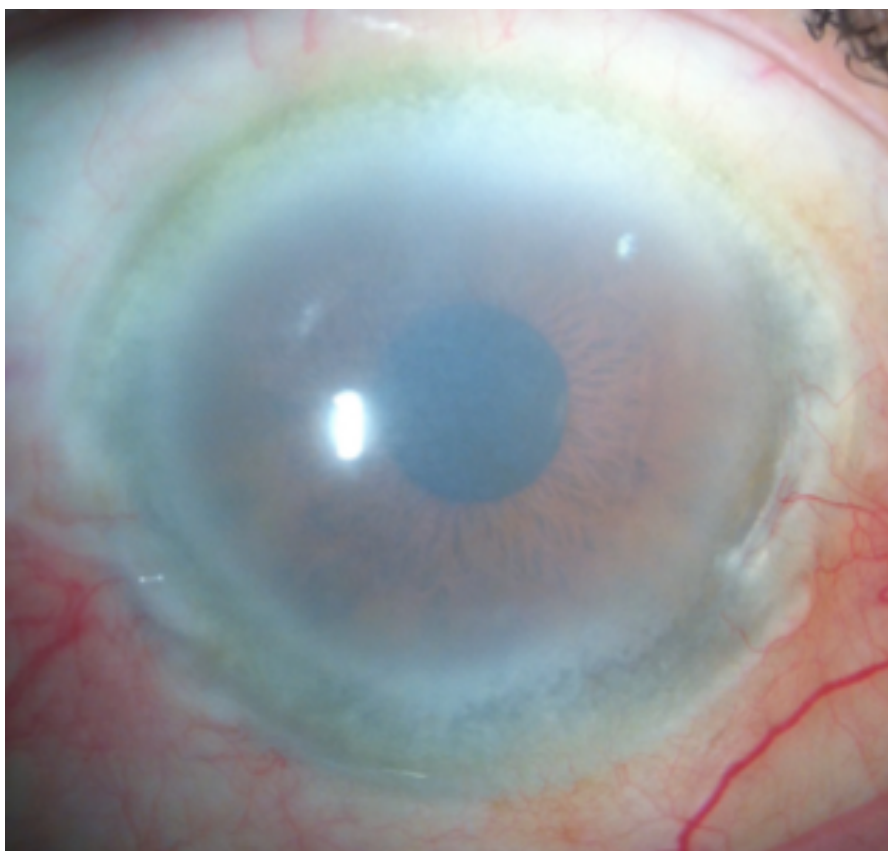
Palavras-chave: Rhinosporidiosis; LCAT; Pellucid Marginal Degeneration; Blueberry Eye .

#### Case Report 1

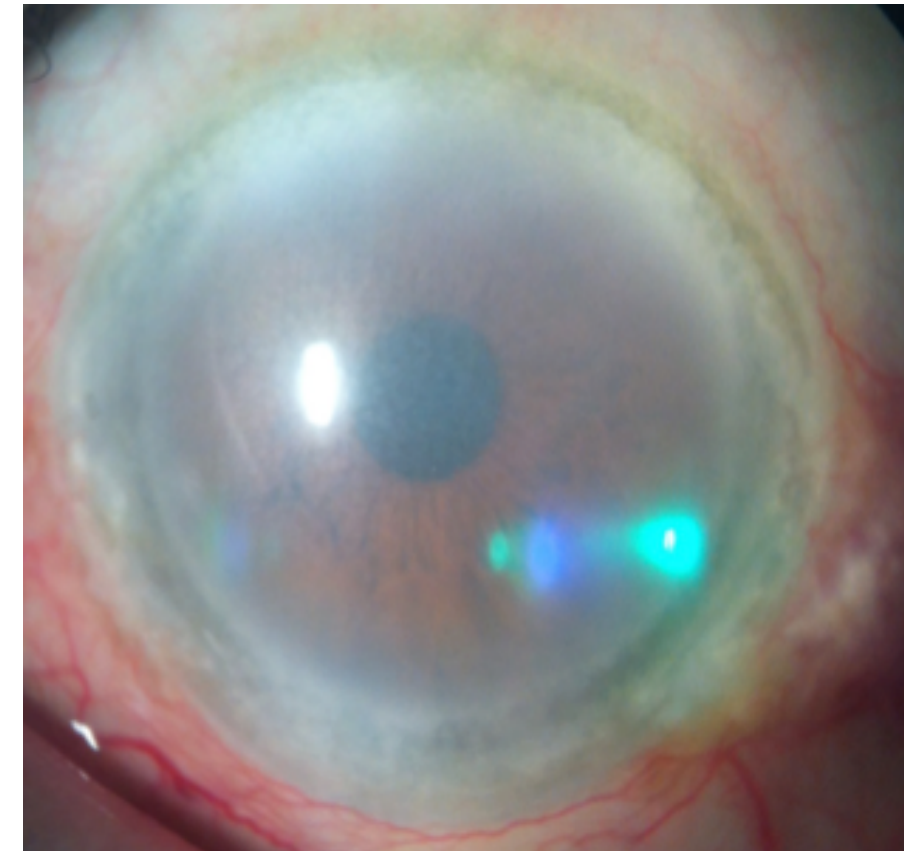
##### History

65-year-old white man with bilateral low visual acuity in the presence of corneal opacities.

**Biomicroscopy:** Conjunctiva clear and quiet; Cornea: symmetrical diffuse, hazy cloudiness of the corneal stroma, mild nasal vascularization OD, no PKs; Anterior chamber: deep and free of cells and flare; iris was normally pigmented.



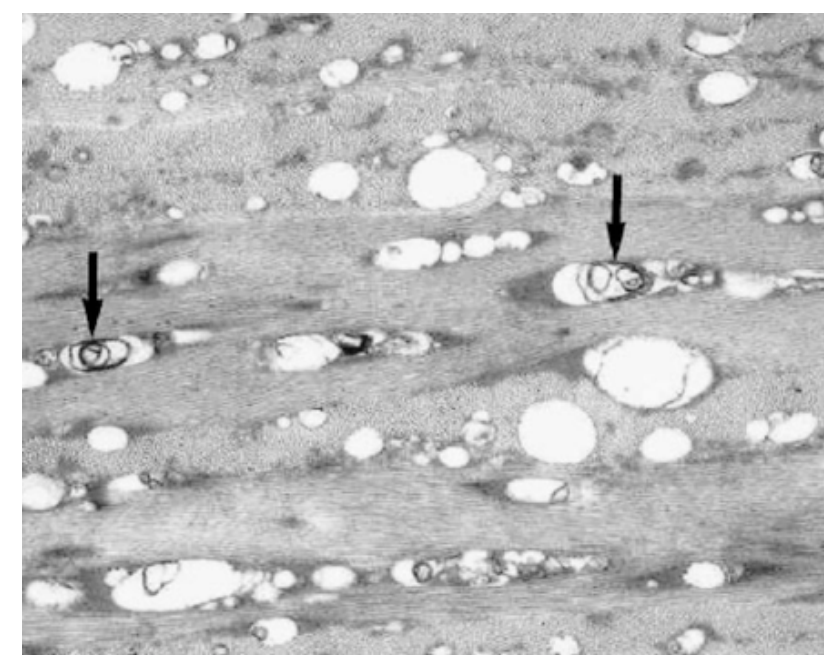
OD: 20/70  
 OS: 20/50



- high-density lipoprotein (HDL) cholesterol was **9 mg/dl** (normal: > 40 mg/dl),
- triglycerides were **139 mg/dl** (normal: < 200 mg/dl).



- Patient underwent a deep anterior lamellar keratoplasty (DALK) in his OD
- Corneal analysis
- Genotype analysis



##### Conclusion

- HDL cholesterol was **9 mg/dl** ; triglycerides were **139 mg/dl** , No proteinuria
- The genotype analysis (PCR amplification and sequencing of the LCAT gene) detected a heterozygous defect caused by a single-nucleotide substitution at codon 123 of LCAT gene in our patient.
- LCAT deficiency: Fish-eye disease.**

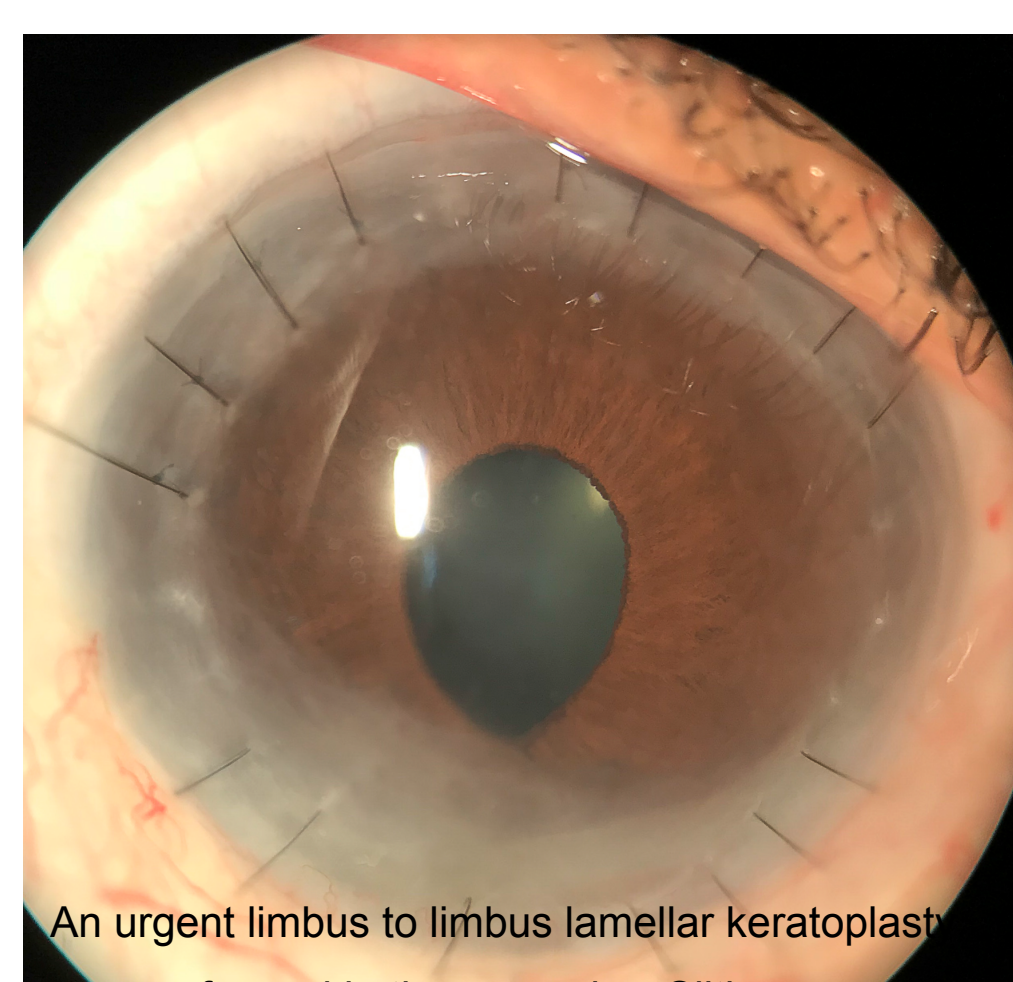
#### Case Report 3

##### History

43-year-old Brazilian woman was referred by an outside ophthalmologist for evaluation of acute decrease of vision in her OD  
**Medical history:** diagnosis of pellucid marginal degeneration more than 10 years earlier.



Biomicroscopy of the OD revealed a marked conical deformation of the cornea with 3+ stromal edema. In the inferocentral cornea, aqueous was noted to emanate from a pinpoint foci of leakage in the area of maximal steepness, and anterior chamber was flat.



An urgent limbus to limbus lamellar keratoplasty was performed in the same day. Slitlamp photography the right eye 4-month postoperative after lamellar keratoplasty presenting a small peripheral anterior synechiae.  
 - Visual Acuity OD: 20/40

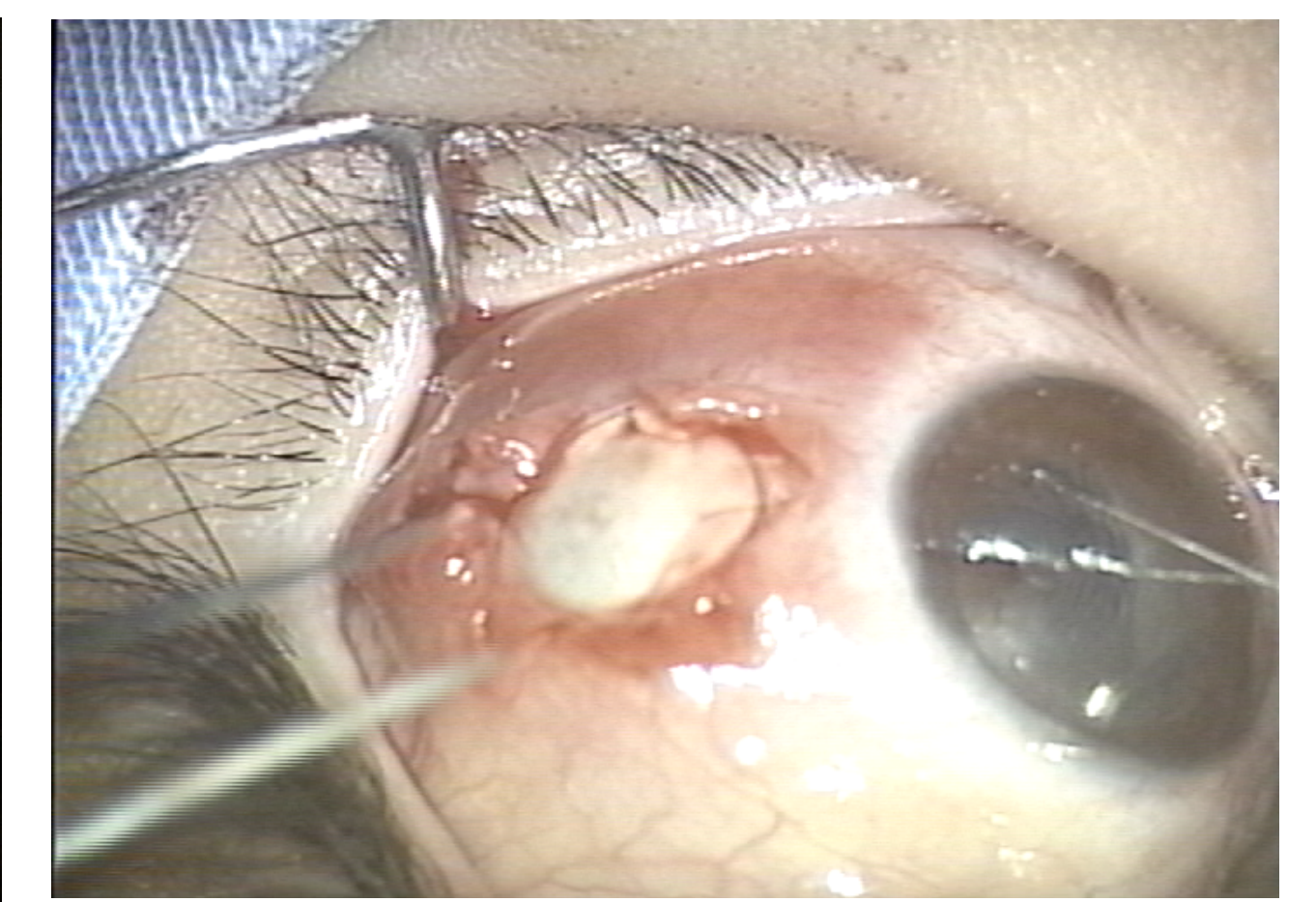
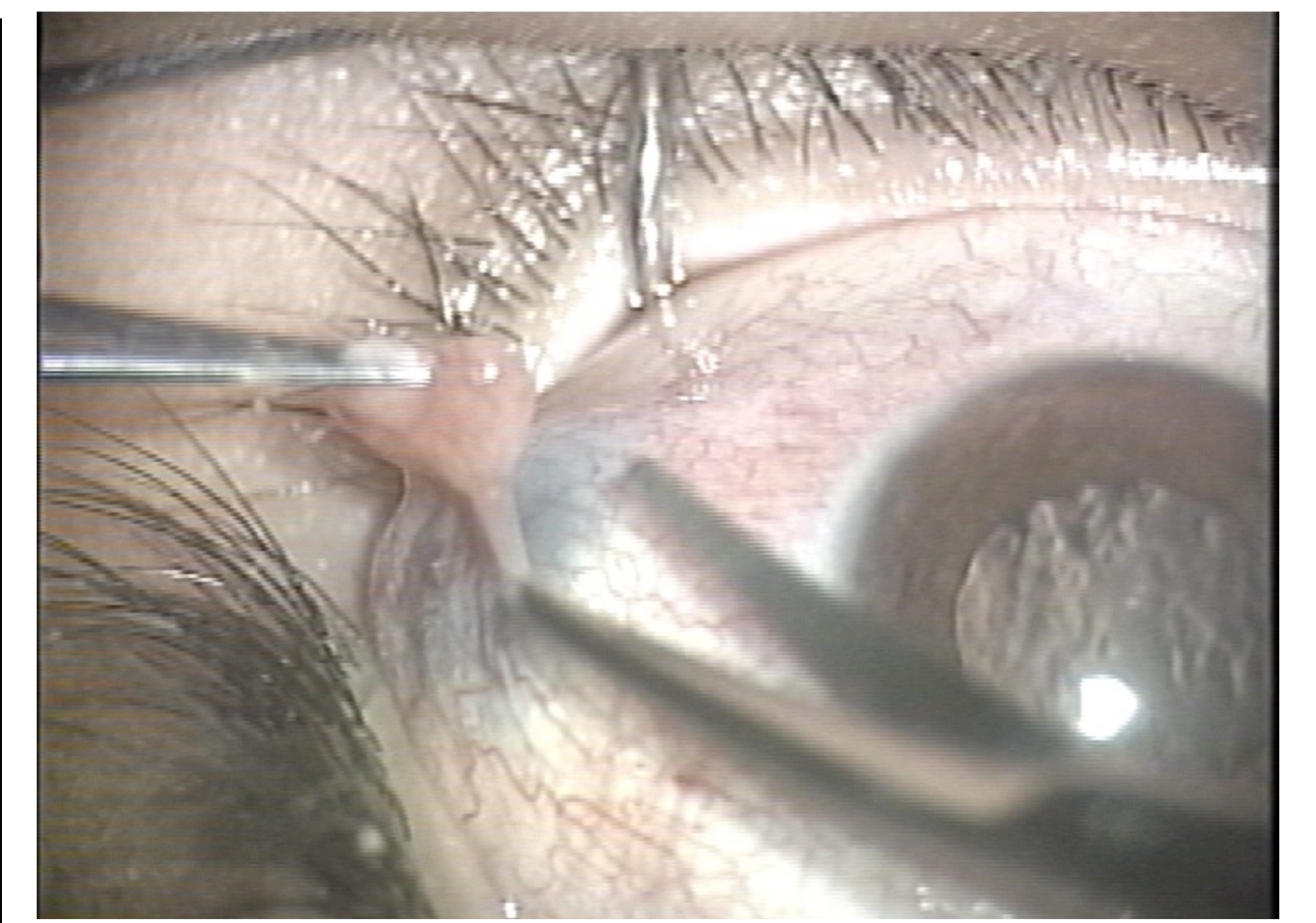
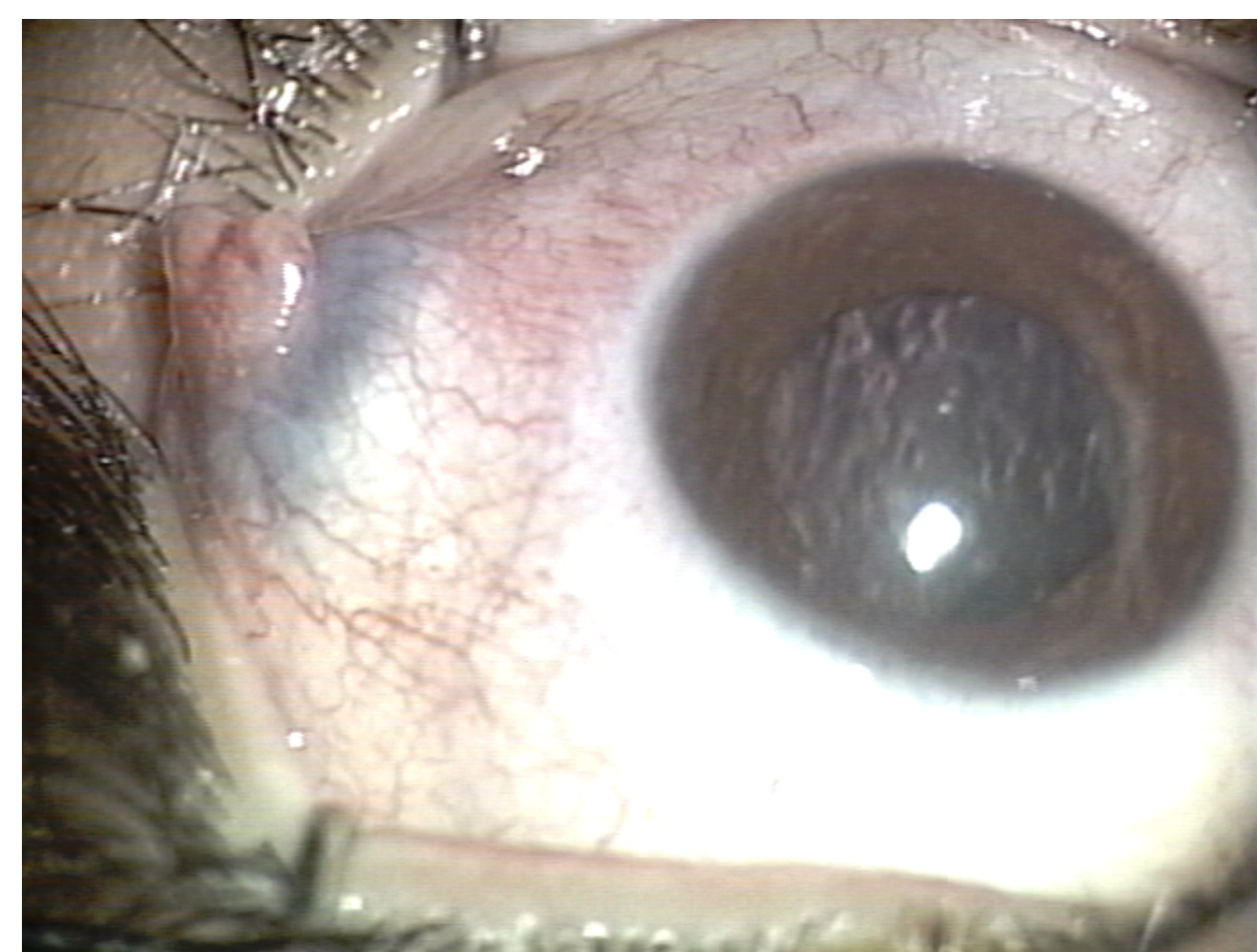
#### Case Report 2

##### History

12-year-old white boy with a protrusion of a mass in the temporal sclera in his OS (8 months). BCVA: 20/20 OU

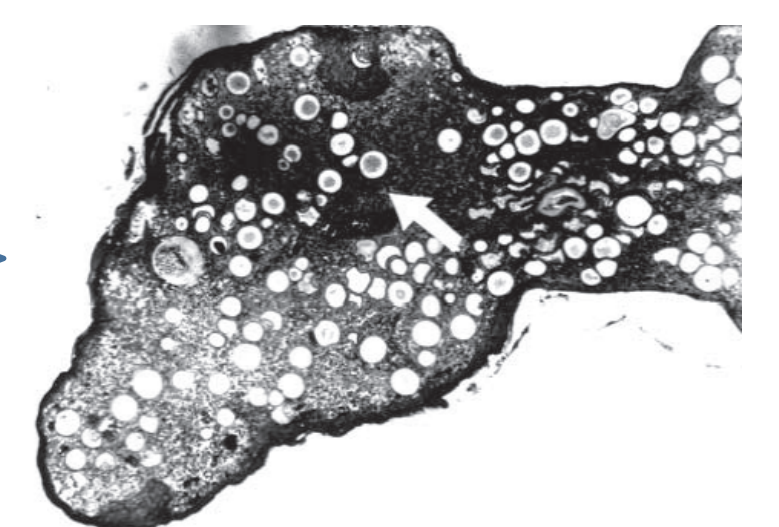
##### Biomicroscopy

- Conjunctiva clear and quiet with a solitary pedunculated vascular mass above a thinning sclera protrusion Cornea: transparent; Anterior chamber: deep and free of cells and flare; iris was normally pigmented.



##### Treatment: Surgery

- The histopathology of the specimen was consistent with **RHINOSPORIDIOSIS**



#### Case Report 4

##### History

30-year-old black man with a protrusion and extreme thinning of the entire cornea OD. BCVA: OD = LP, OS = 20/25



- Patient underwent a sclerokeratoplasty in his OD.



Figure 2. The immediate postoperative appearance of the eye.