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CASE PRESENTATION



- Abdel Rahman a 3 years old child presenting to glaucoma clinic for IOP check
- His mother is giving history that he has glaucoma since birth and he had **2 glaucoma surgeries** when he was born

- Upon examination the kid was found to have trabeculectomy surgeries in both his eyes
- His corneas are 14 mm in both vertical and horizontal diameters
- His IOP 10 mmHg OU



- Disc examination **no cupping**
- Corneas are clear **no Haab striae**
- Refraction **emmetrope**
- Axial length **20 mm**
- History **his Grandfather** has the same condition but he never did any operations and never diagnosed with glaucoma

The child is Having
Megalocornea



Why not congenital glaucoma

Triad of epiphora,
blepharospasm and
photophobia.

corneal clouding and ocular
enlargement

Haab striae



Congenital glaucoma

- Axial myopia
- a corneal diameter greater than 13.0 mm
- a cup-to-disc ratio greater than 0.3

IOP greater than 20 mmHg

The baby should be calm

Valsalva maneuver and eyelid squeezing can cause an IOP of 30 to 40 mmHg even in healthy eyes

Keep in mind

Chloral hydrate has the least effect on IOP measurement

Some agents are known to increase IOP, including **ketamine** (minimal to mild) and **succinylcholine** (marked)

Megalocornea

- A rare **nonprogressive** enlargement of the cornea to **13 mm or greater**
- **Histologically normal.**

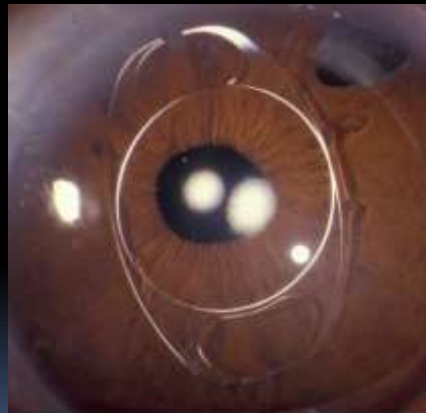
- Gonioscopy.
- Widened ciliary ring indicates **anterior megalophthalmos.**

Medical Care

- Correction of **refractive error** and thorough evaluation for findings of **anterior megalophthalmos**.
- The development of **cataracts** and **glaucoma** is necessary.

- The **zonules** supporting the lens capsule surrounding the cataract are often weak.

- **IOL size**



- Pediatric developmental specialist
- These include albinism, Down syndrome, Marfan syndrome, Alport syndrome, craniosynostosis

Take Home message.

Keep in mind



