Hyperoleon masquerading as leukocoria

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DESCRIPTION

An 8-year-old boy presented with white reflex in the right eye (RE) for 6 months. RE visual acuity was perception of light present with projection of rays accurate in all quadrants. Slit-lamp examination revealed numerous emulsified silicone oil droplets (figure 1) filling the anterior chamber completely, obscuring the view of posterior segment. The patient had a history of multiple vitreoretinal surgeries for retinal detachment. The last vitreoretinal surgery with silicone oil injection was done 2 years ago and the patient was lost to follow-up (so timely removal of silicone oil could not be done). Intraocular pressure (IOP) was 48 mm Hg on maximum tolerable glaucoma medications. RE ultrasonography revealed an oil-filled eye with attached retina. RE silicone oil removal was done and postoperative visual acuity was hand movements close to face with projection of rays accurate in all quadrants, IOP was 12 mm Hg. There was corneal oedema postoperatively which improved over time for 2 weeks. The retina was attached at 3-month follow-up. Emulsification of silicone oil is a known complication after its use in vitreoretinal surgery.¹ It usually appears as oil droplets superiorly in anterior chamber or in angles during gonioscopy.² There is no report of hyperoleon (emulsified silicone oil) completely filling the anterior chamber masquerading as leukocoria. Causes of leukocoria at this age group could be Coats' disease, congenital cataract, retinoblastoma (late onset), astrocytic hamartoma, ocular toxocariasis, chorioretinal coloboma, healed



Figure 1 Hyperoleon in anterior chamber.

keratitis, retinal detachment, endophthalmitis, etc.³ There is a stronger correlation with emulsification and longer duration of silicone oil stay.⁴ A higher number of large-diameter emulsified silicone oil droplets were found in younger patients compared with older individuals.⁵ Timely removal of silicone oil is necessary to prevent complications like emulsification, secondary glaucoma and keratopathy.⁶

Learning points

- Hyperoleon completely filling the anterior chamber can masquerade as leukocoria.
- It can cause intractable secondary glaucoma and corneal decompensation.
- Timely removal of silicone oil is necessary to prevent its complications.

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