If surgery is required to control IOP in a patient with nanophthalmos, phacoemulsification with IOL implantation is a good option, but the complication rate is high.

The Science behind the Tip

Nanophthalmos, “small eye-big trouble”, is a form of microphthalmos which is not accompanied by other congenital anomalies and is often familial. Hyperopia is present from birth and the axial length is less than 20 mm. Angle-closure glaucoma occurs between the 4th and 6th decades of life.

Glaucoma surgery in nanophthalmos has an extremely high complication rate with disastrous visual results¹. Late choroidal effusion occurs in up to 50% of patients after trabeculectomy with mitomycin C².

A recent study of phacoemulsification and IOL in these patients shows that the results have improved and choroidal effusion is less likely to occur (5%), but that complications (for example malignant glaucoma and severe uveitis) are still common³. Persistent choroidal effusion can be successfully treated by partial thickness sclerectomy, which suggests that reduced scleral permeability to protein secondary to thickened sclera plays a pathophysiological role in this complication⁴.

References


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