Management of posteriorly dislocated crystalline lens with perfluorocarbon liquid and fibrin glue-assisted scleral-fixated intraocular lens implantation.

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Publication Date: 2013

Abstract:

We describe a technique that uses a 23-gauge transconjunctival sutureless vitrectomy with perfluorocarbon liquid (PFCL) and phacoemulsification to manage a dropped nucleus. The PFCL is injected into the vitreous space until the dislocated lens reaches the iris plane and is then removed using phacoemulsification in the anterior chamber. After intraocular lens (IOL) implantation, a 23-gauge forceps is passed through the sclerotomy to grasp the IOL haptic, which is pulled onto the ocular surface. Tunnels are made at the edge of the flap with a 26-gauge needle into which the 2 haptics are tucked for additional stability. The scleral flaps and conjunctiva are then glued using biological glue. Perfluorocarbon liquid reduces lens repulsion and blocks the transmission of the ultrasound stream to the retina. The fibrin glue-assisted sutureless IOL implantation technique could reduce complications and suture-related problems.