

Visual rehabilitation for aphakia with scleral tunnel fixated intraocular lens: The UKMMC experience

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ABSTRACT

Objective: There are several options of intraocular lens(IOL) implantation when capsular support is inadequate including scleral-fixated IOL(SFIOL). SFIOL implantation using routine three-piece IOL secured with scleral tunnels is gaining popularity due to its simplicity and ease of using routine readily available sulcus fixated three-piece IOLs. This also places the IOL nearer to physiological nodal point. **Method:** Retrospective case series of scleral tunnel fixated three-piece IOLs from September 2016 to May 2018 in UKMMC. **Results:** This study comprised of eight cases. The mean age at surgery was 62 years (range 11 to 83 years). The causes of inadequate capsular support were complicated previous surgery in five eyes (62.5%), trauma in two eyes (25%) and spontaneous lens dislocation in one eye. Scleral flap was created in four eyes. All patients had two perilimbal sclerostomy wounds and partial thickness scleral tunnels for tucking of haptics. In the eyes with scleral flaps, these were sutured with Vicryl. The three-piece intraocular lenses used were the AR40E SENSAR™ in seven eyes (87.5%) and ALCON MN60AC used in one eye. All patients had an improved visual acuity (VA) except one case of unchanged VA with pre and post operation VA of at least 6/12. Postoperatively, four eyes had raised intraocular pressure which was controlled with topical medication and two eyes had cystoid macular oedema which responded to topical NSAIDS. There were no cases of postoperative retinal detachment or dislocated IOL. One eye had posteriorly tilted IOL which was observed. Duration of follow up ranged from two weeks to thirteen months. **Conclusion:** Posterior chamber scleral tunnel fixated IOL implantation provided a favourable outcome in many cases with minimal complications.

KEY WORDS:

Scleral tunnel fixated intraocular lens