

## Abstract 399

### COMBINED IMPLANTATION OF ARTIFICIAL IRIS WITH CARLEVALE SCLERAL FIXATED INTRAOCULAR LENS AS A SINGLE PROCEDURE

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#### Introduction:

The ARTIFICIALIRIS from HumanOptics is the world's unique foldable iris prosthesis, for both medical and aesthetic reconstruction of eyes with complete or partial aniridia. Carlevale sutureless scleral fixated intraocular lens (SF-IOL) (Carlevale by Md Tech) is a viable option in cases of insufficient posterior capsular support.

#### Materials and methods:

The purpose of this is to describe a combined case of anterior segment reconstruction using an ARTIFICIALIRIS (HumanOptics) implantation, with implantation of a sutureless scleral fixated intraocular lens (SF-IOL) (Carlevale by Md Tech), in a case of deficient capsule post eye trauma.

Retrospective review of the patient's notes. A twenty-six-year-old patient had a significant eye trauma (ruptured globe) after being hit by a metallic object. She underwent primary repair, but months later, she developed retinal detachment due to proliferative vitreoretinopathy (PVR). Two surgeries were needed to stabilize the retina under silicone oil. Due to the severity of the trauma, the eye had already lost more than eighty percent of the iris tissue and the lens capsule was deficient.

#### Results:

After suturing of the artificial iris (HumanOptics) over the Carlevale IOL was carried out, scleral pockets were created 180° apart. Pars plana vitrectomy, removal of silicone oil, examination under anaesthesia were done. The HumanOptics artificial iris-Carlevale IOL complex was then folded, and through a corneoscleral incision was injected into the anterior chamber (AC). The haptics were then externalized using opening distal forceps through the sclerotomies, and the plugs were secured in the scleral pockets.

#### Conclusions:

Management of aphakia in cases of traumatic aniridia using an artificial iris sutured over a sutureless SF-IOL, such as the Carlevale in a single procedure, may be a safe and effective option to restore the cosmetic appearance and maintain stability of the eyeball.