Long Term Follow up of a Tripod Design Anterior Chamber Intraocular Lens (ACIOL)

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Abstract:

A 45 year old male presented with partially exposed haptic loop of a tripod design anterior chamber intraocular lens (ACIOL) in the right eye. The best corrected vision was 20/60 right eye and 20/20 left eye. The patient refused surgical intervention of the right eye ACIOL in view of good vision. The patient was counselled against high risk of endophthalmitis and kept under close observation since last few years. We report a case of exposed loop of ACIOL since last 5 years with no complications.

Key Words: Exposed Haptic, Anterior Chamber IOL, Explantation of IOL

Introduction:

Intraocular lens implantation (IOL) was first done by Sir Harold Ridley in 1949 at Thomas Hospital London 1. Complications of anterior chamber IOL are extrusion, dislocation, decentration, endothelial decomposition, inflammation and glaucoma 2, 3, 4. Dislocation of intraocular lens outside the eye is one of the indications of explanting the IOL 5. The most common complication which may be associated with exposed haptic is endophthalmitis 2-6. We report a case of exposed haptic loop of ACIOL due to chronic rubbing following post traumatic cataract surgery.

Case Report:

A 45 years old male patient underwent right eye cataract surgery for post traumatic cataract 13 years back. A tripod design anterior chamber intraocular lens (ACIOL) was implanted in the right eye. The best corrected visual acuity (BCVA) was documented as 20/60 right eye and left eye was asymptomatic with BCVA 20/20.

The patient was a known case of allergic conjunctivitis for which he received symptomatic treatment over the last 15-20 years. The patient presented 5 years back with complains of foreign body sensation in right eye.

On examination one of the haptic of the tripod ACIOL was exposed and loop of the haptic was external to the eye (Fig. I & II). However, the patient maintained BCVA of 20/60 right eye. There was no anterior chamber reaction and no evidence of infection. The intraocular pressure was 12mm of Hg right eye and 14 mm Hg left eye. The specular count of the right eye was 840 cells/mm².

In view of high risk of endophthalmitis, the patient was counselled for explantation of ACIOL under explained risk of endothelial failure. However, the patient refused IOL explanation in view of relatively good vision and lack of symptoms. The patient was asked to remain under close follow up due to risk of infection. Over the follow up of last 5 years, there has been no episode of infection or reaction. The patient is asymptomatic maintaining BCVA of 20/60 right eye. The specular count has decreased to 710 cells/mm², while intraocular pressure is normal.

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Fig. I: Exposed Haptic of tripod ACIOL (arrow showing exposed part of ACIOL haptic & arrow head showing intra ocular part of haptic).
Discussion:

Exposure of haptic of anterior chamber has been reported in the past due to trauma, eye rubbing or due to infections. In our case the patient was a known case of allergic conjunctivitis and eye rubbing may have been the cause of limbal thinning and haptic extrusion. There was no leak of aqueous from anterior chamber and pressure Siedel test was negative at all examinations.

Risk of endophthalmitis is high following such exposed haptic and it is advisable to explant the IOL or exchange it. However, due to critically low endothelial count, risk of endothelial decompensation is also high. Our patient refused surgical intervention because he was asymptomatic and maintained good vision.

On regular follow up no fresh complaints were noted. Possible reasons for prevention of endophthalmitis could be that the exposed haptic was covered with upper lid and not exposed to the environment. Also there was no leakage of aqueous and anterior chamber depth was maintained. The chronic trauma due to rubbing and subsequent surrounding inflammation and fibrosis must have sealed any leakage areas around the haptic loop. To the best of our knowledge this is the first case of an exposed IOL haptic which has remained asymptomatic on regular follow up for last 5 years.

References: