

Unusual Case of Spontaneous Luxation of Crystalline Lens

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ABSTRACT

The aim of this study was to report an uncommon case of spontaneous crystalline lens dislocation into anterior chamber. An otherwise healthy female of 31 years reported to the OPD with a spontaneous dislocation of crystalline lens into the anterior chamber. The lens was successfully extracted by ICCE and a anterior chamber IOL was Implanted. In this interventional case report ,it was found that the female subject achieved BCVA of 6/9 postoperatively after 3 months.It was concluded that a case of spontaneous dislocation of crystalline lens was successfully treated by Intra capsular extraction surgery.

Key words: Spontaneous, luxation, crystalline lens, anterior chamber

INTRODUCTION

Spontaneous dislocation of a clear lens is very uncommon and luxation to the anterior chamber even rarer. Other reasons commonly involved in lens subluxation are Marfan's syndrome, spherophakia, retinopathia pigmentosa, homocystinuria, hyperlysinuria, sulfite oxidase deficiency.^[1,2,3,4,5,6,7,8] We report a case of spontaneous dislocation of crystalline lens into the anterior chamber and its successful management by surgical approach.

CASE REPORT

In February 2015 a 31 year old female patient reported to our OPD with complaint of diminution of vision since three days in her Right eye. She had no complaint of pain, redness headache or photophobia. A general physical examination revealed no other abnormality. Her medical and family history was also unremarkable. There was no associated history of trauma.

A slit lamp bio microscopy examination revealed a crystalline lens in the anterior chamber. ^[Figure 1,2] The cornea was clear with no sign of oedema. There were no zonules attached to the lens. The IOP was 14.6 and 12.2 mm of Hg in right and left eye respectively. The axial length on A-scan was 23.21 and 23.34 mm in right and left eye respectively. Her best corrected visual acuity was 6/12 and 6/6 with -3.73DS/-1.00 DC at 140⁰ and -0.75 DS/-0.50DC at 120⁰.

The left eye was generally unremarkable with no significant findings such as any loss of zonules, lens dislocation. Gonioscopic examination revealed no angle anomalies and fundus was within normal limits. No sign of pseudoexfoliation syndrome was seen.

The patient was planned for lens extraction procedure. Topical antibiotics and also pilocarpine drops were given preoperatively to avoid posterior dislocation of lens. A corneoscleral incision was made and high molecular viscoelastic device was injected through a side port to facilitate easier removal of lens and restrict the contact between lens surface with posterior corneal surface. The lens was extracted without any complications. Anterior vitreous face was found to be intact with no vitreous prolapsed in Anterior chamber hence no vitrectomy was needed. A anterior chamber intra ocular lens was implanted and peripheral iridotomy was performed.

On first post operative day the patient a mild corneal oedema was seen which soon resolved. No other significant complications were noted. She achieved a BCVA of 6/9 after 3 months post operative follow up.

DISCUSSION

Spontaneous luxation of crystalline lens is a rare occurrence. Generally most common cause of crystalline lens luxation is associated with trauma with upto 50% dislocations being reported^[1,2]. Another cause is hereditary associated with systemic disturbances such as Marfan's syndrome, Weill-Marchesani syndrome, homocystinuria, hyperlysinuria, sulfite oxidase deficiency etc.^[1,2,3,4,5,6,7,8]

Our case was interesting because the patient presented with a spontaneous dislocation of the crystalline lens into the anterior chamber without any history of trauma and in the absence of any systemic disease.

Such spontaneous luxation of lens generally causes many complications such as corneal oedema, uveitis or a pupillary block glaucoma therefore lens extraction should be performed as soon as possible.^[1-6] Fortunately none of the complications were seen in our case may be due to prompt presentation of the patient.

In our case a Intra capsular extraction surgery through a sclero corneal incision along with anterior chamber IOL was implanted. No vitrectomy was needed as there was no vitreous in anterior chamber. An intracapsular extraction through a limbal incision was suggested by Joffe et al.^[3], while vitrectomy with scleral incision was suggested by Peyman et al.^[9] Seong et al.^[10] however recommend phacoemulsification with anterior vitrectomy.

Postoperative period was uneventful mostly except for mild corneal oedema on day one which resolved and patient achieved a BCVA of 6/9 after three months.

CONCLUSION

We report it as successfully treating a case of uncommon spontaneous dislocation of crystalline lens by Intra capsular extraction surgery through a sclero corneal incision was done along with anterior chamber IOL was implanted. No vitrectomy was needed as there was no vitreous in anterior chamber. High molecular weight viscoelastic device was used to facilitate easier lens removal and minimise the corneal endothelial loss.

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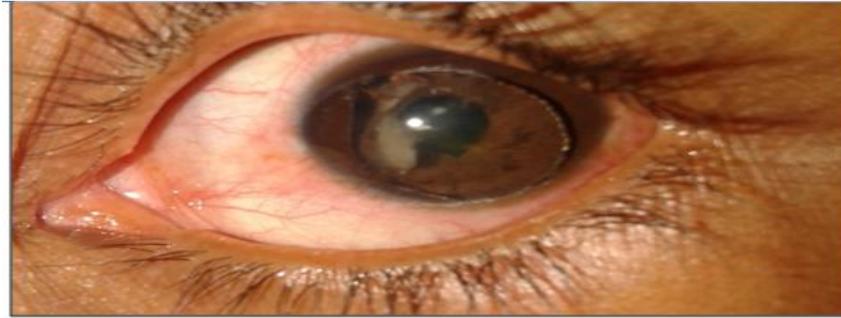


FIGURE 1: Clinical picture showing crystalline lens dislocated in Anterior chamber



FIGURE 2: Clinical picture showing crystalline lens dislocated in Anterior chamber