

## Management of Occlusive Pupillae and Complicated Cataract Leading the Blind from Darkness to Light

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### Abstract

**Purpose:** To report successful management of occlusive papillae and complicated cataract in patients who came for blindness certificates.

**Methods:** Case-1 F/60 came for blindness certificate, LE was eviscerated due to trauma. she had PL+PR accurate in RE with occlusive pupillae. CASE 2 M/20 presented for blindness certificate due to bilateral loss of vision. RE PL +Ve and LE PL negative. RE occlusive pupillae, LE phthisis bulbi. Case-3 F/45 presented with sudden decrease of vision 3 days after cataract surgery. RE PL PR+ with occlusive pupillae. Case-4 M/60 presented with LE occlusive pupillae with history of trauma 10yrs ago. All 4 underwent B-SCAN, YAG LASER and additional surgery as needed along with medical treatment.

**Results:** BCVA IN Case1-6/24N18, CASE2-CFCF, CASE-3-6/6N6, CASE4-6/24N18

**Conclusion:** Never say "never-again" without careful evaluation of patients who come for blindness certificates. Good history, clinical evaluation and application of latest diagnostics, Lasers & surgical techniques can help some of the so called blind people see again.

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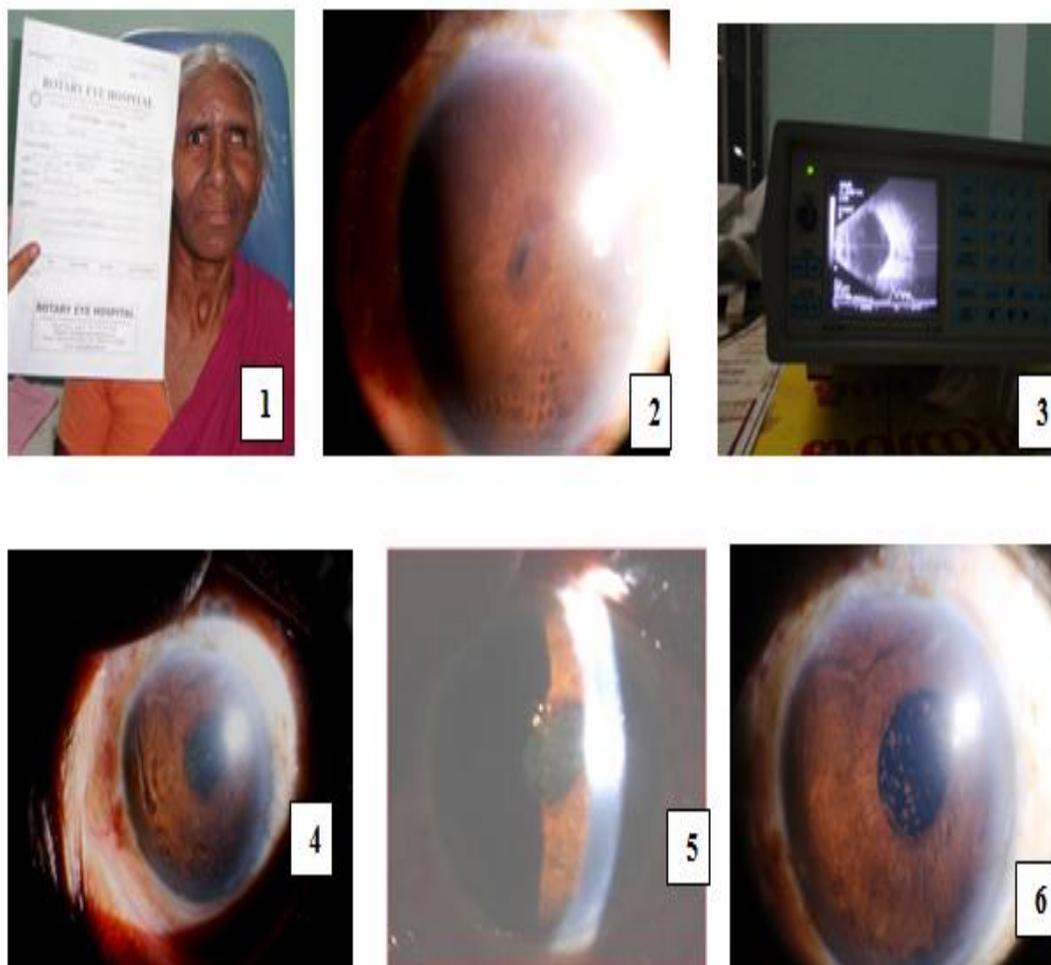
### I. Introduction

The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy, said Martin Luther King, Jr. Such a challenge for ophthalmologists of all subspecialties is uveitis as it deals with every cell and tissue of the eye, not just the eye, but beyond. The implications of its precise diagnosis and the controversies surrounding its optimal management have direct implications on the quality of life<sup>1</sup>. About 25% of blindness in India and other developing countries is attributed to uveitis and its complications, such as complicated cataract, occlusive pupillae glaucoma, cystoid macular edema, or retinal photoreceptor or optic nerve damage. In developed countries the incidence of blindness from uveitis varies from 3% to 10%<sup>2</sup>. The tailored tactic i.e. use of medical, Laser and surgery is followed while managing uveitic patients. In this study we present a case series of 4 patients who presented with occlusive papillae due to uveitis in three different clinical scenarios before and after cataract surgery and how they are managed. Two out of these 4 patients came to our hospital for blindness certificates.

### II. Material And Methods

#### Case 1

A65 yrs old female came to our hospital for blindness certificate. She lost her left eye in childhood due to trauma. She underwent cataract operation in right eye 5 yrs back and was unable to see since 3 yrs. She does not have any systemic illness. At presentation she had RE PL+ PR accurate and LE NO PL. Right eye diagnosed as having Occlusion Pupillae and Left eye phthisis bulbi. Ultrasound B Scan was normal in RE with IOL reverberations, IOP was 20mmHg. After explaining the prognosis we did YAG LASER pupilloplasty (3 mj single pulse 10 shots) repeated 3 times with one week interval each time. Patient was given Systemic and topical steroids along with cyclopentolate eye drops. After 4 wks her pupil opened up enough with few pigments on IOL and patient regained 6/24 with N18 best corrected vision and patient was given glasses prescription instead of blindness certificate.



**Fig.1** Digital photograph showing RE-Occlusive Pupillae LE-Phthisis bulbi.

**Fig.2** RE Slit Lamp Photograph showing occlusive pupillae

**Fig.3** RE ultrasound B scan showing normal posterior segment with IOL shadows

**Fig.4** RE 1 week after YAG Laser Pupilloplasty

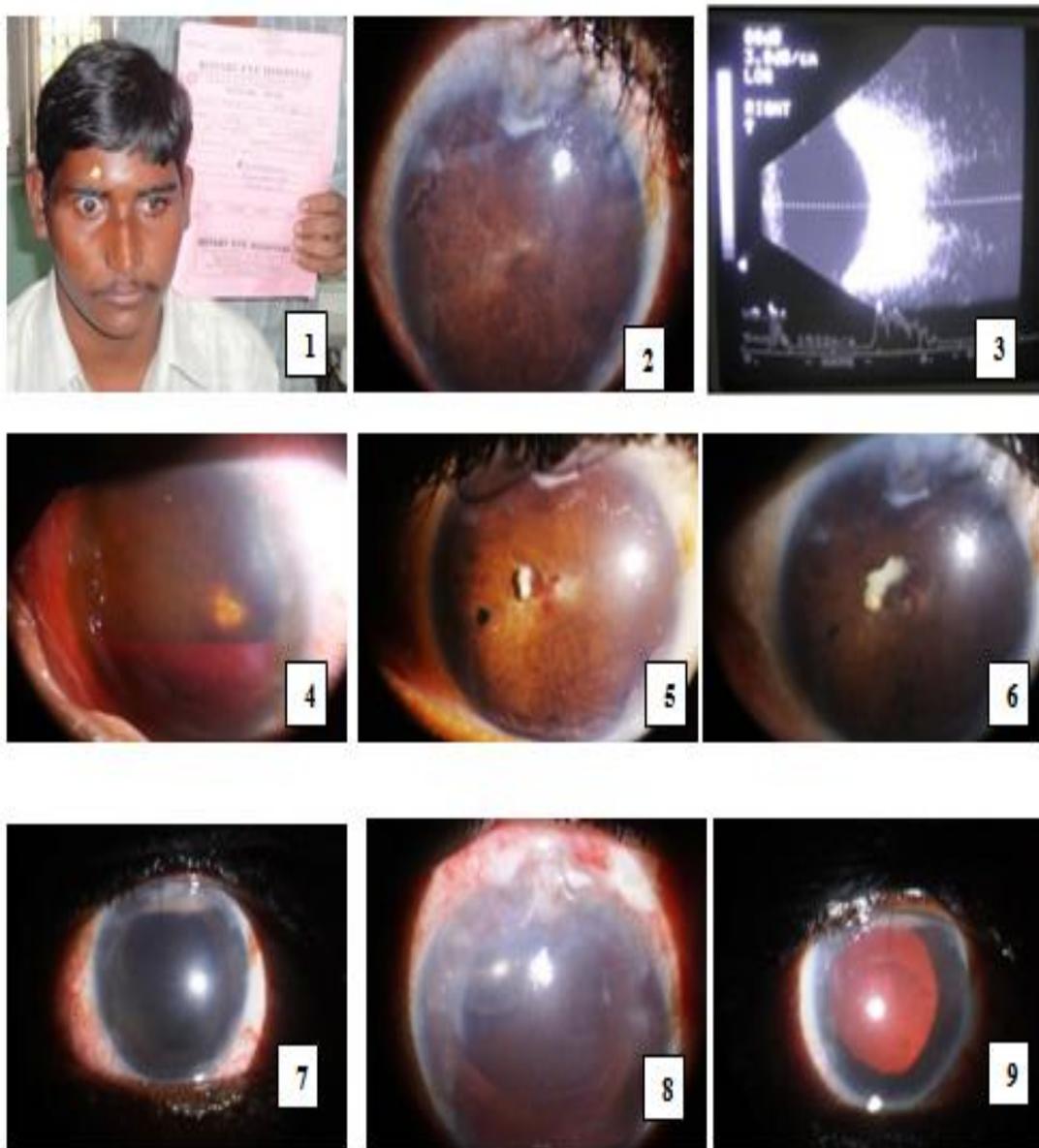
**Fig.5** RE slit image showing pigments on IOL

**Fig.6** RE 4 weeks after YAG Laser Pupilloplasty

## **CASE 2**

A 20 yrs old male presented for blindness certificate with a complaint of bilateral loss of vision. He was receiving treatment for past 3 yrs but no recovery in vision. No medical records were available. His vision in RE PL positive and LE PL negative. RE is diagnosed as occlusive papillae, LE Phthisis bulbi. Systemic examination is nil relevant. RE Ultrasound B Scan was normal, IOP was 21 and 4 mm of Hg. He underwent YAG laser pupilloplasty (3 mj- single pulse- 15 shots repeated 3times in 3 wks ). Medical treatment was given with systemic, topical steroids and mydriatics for 2wks.Later we could visualise lens opacity underneath and revised the diagnosis as complicated cataract. He was taken for surgery after explaining guarded visual prognosis. After careful synechiolysis using micro scissors cataract extraction with anterior vitrectomy and surgical Peripheral iridectomy were done.

Postoperative 6 wks he regained counting fingers close to face with accurate perception of light. Fundus examination revealed myopic degeneration with normal IOP (16 mm Hg with AT) Patient was able to perform his daily routine activities independently with psychological relief from feeling of being completely blind.



**Fig.1** Digital photograph showing RE-Occlusive Pupillae LE – Phthisis bulbi.

**Fig.2** Slit lamp image of RE showing occlusive pupillae

**Fig.3** RE ultrasound B scan showing attached retina

**Fig.4** RE Immediately after YAG Laser pupilloplasty showing hyphaema

**Fig.5** RE one week after YAG Laser pupilloplasty showing dense posterior synechiae and lens opacity.

**Fig.6** RE 3 weeks after YAG Laser pupilloplasty showing complicated cataract

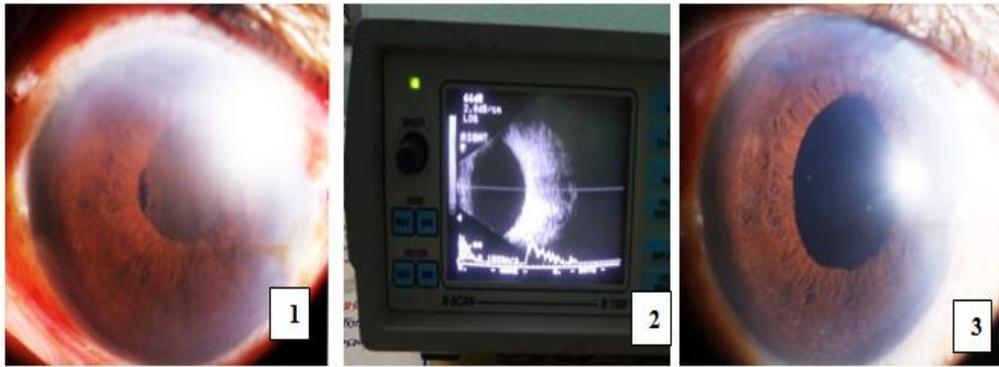
**Fig.7** RE First post operative day after cataract extraction

**Fig.8** one week post operative with dilated pupil

**Fig.9** 6 wks post operative with good fundal glow

### Case 3

A 45 yrs old female presented with sudden decrease of vision 5 days after cataract surgery. On examination she had RE PL PR accurate . She is diagnosed as having occlusive papillae due to dense inflammatory membrane covering the entire pupil. Left eye was normal except for early nuclear sclerosis, Right eye ultrasound B-SCAN was normal, We did YAG LASER. Pupilloplasty and continued systemic and topical steroids and mydriatics. Patient regained 6/6, N6 vision after 6 wks follow up.



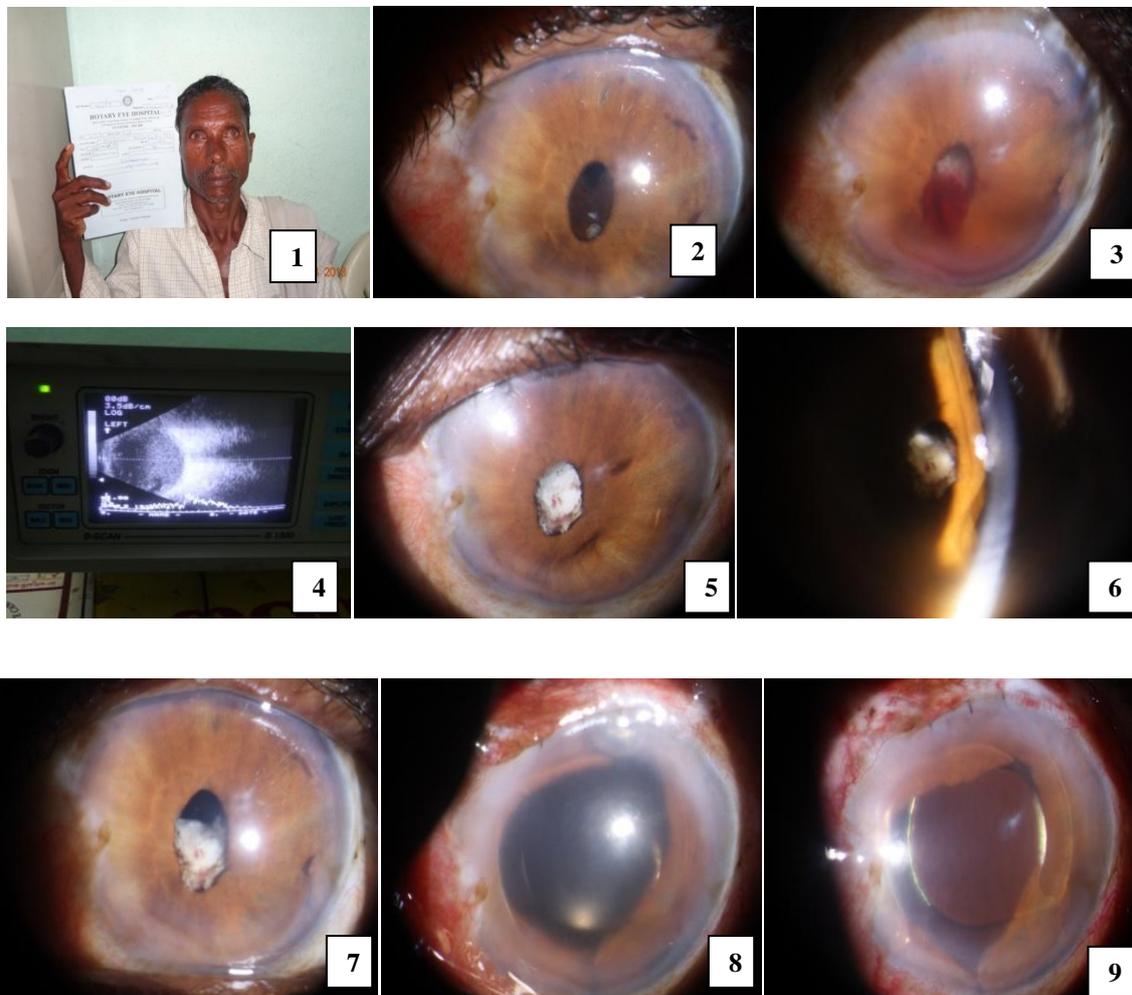
**Fig.1** Slitlamp image of RE showing occlusive pupillae with inflammatory membrane

**Fig.2** Ultrasound B-scan showing normal fundus

**Fig.3** Slitlamp image showing clear pupil with IOL in place after YAG pupilloplasty

**Case-4**

60 years male presented with RE cataract, LE occlusive pupillae with history of trauma 10yrs ago. He was told there is no use of doing anything to this eye. He came for RE cataract surgery. After doing cataract surgery in RE, we have evaluated LE with USG bScan which was normal, PL PR accurate. He underwent YAG laser twice and we identified there is a complicated cataract underneath the papillary membrane. After breaking the snechia intracapsular cataract extraction was done and anterior vitrectomy with ACIOL was placed He regained 6/24 N18 vision in Left eye.



**Fig.1** Digital photograph showing RE-cataract LE –Occlusive papillae,

**Fig.2 Slit lamp image of LE showing occlusive pupillae**

**Fig.3** LE Immediately after YAG Laser pupilloplasty showing hyphaema

**Fig.4** LE ultrasound B scan showing attached retina

**Fig.5** RE one week after YAG Laser pupilloplasty showing dense posterior synechiae and lens opacity.

**Fig.6,7** RE 3 weeks after YAG Laser pupilloplasty showing complicated cataract

**Fig.8** one week post operative with dilated pupil with ACIOL

**Fig.9** 6 wks post operative with good fundal glow with ACIOL

### **III. Discussion and Conclusion**

Formation of pigmented membranes across the pupil is a common complication of uveitis<sup>3</sup> People presenting with blindness either in one or both eyes must be carefully examined before we really stamp them as legally blind. Numerous reports have been published about the use of single pulses of 4 to 12 mJ of YAG Laser to treat pupillary membranes<sup>4</sup>. Our patients are also benefited by YAG laser as shown above. The commonest indication for surgery in uveitis include Visual rehabilitation i.e surgery for removal of cataract<sup>5</sup> A combination of proper history, clinical examination, evaluation using modern equipment, medical management, YAG laser and surgery can sometimes help some of the so called blind people see again. So please Never say “never-again” without careful evaluation of patients who come for blindness certificates because today there are ways to open the closed doors and lead the blind from darkness to light which can change their quality of life. **Tamasoma jyothirgamaya – leading from darkness to light**

### **References**

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