

## A 6-RAYED STAR SHAPED SCLERAL FIXATION NET AS A SUPPORT FOR POSTERIOR CHAMBER INTRAOCULAR LENS IMPLANTATION IN AN APHAKIC EYE WITHOUT POSTERIOR CAPSULE

Yi-hsin Chen, Ken-Kuo Lin,  
Chiun-Ho Hou, and Jiahn-Shing Lee

**Purpose:** The aim of this study was to describe a modified technique which created a man-made capsular support for posterior chamber intraocular lens (PCIOL) implantation in an aphakic eye without posterior capsular.

**Methods:** One 10-0 polypropylene suture was used to make two overlapping but opposite faced equilateral triangles (which formed a 6-rayed star shaped scleral fixation net) as a man-made capsular support for PCIOL implantation on a twenty-year-old female patient who had surgical aphakia since one year of age.

**Results:** The PCIOL remained well centered and neither tilting, nor complication was noted after the surgery.

**Conclusion:** The surgical technique for double triangle (6 rayed star shaped) scleral fixation net is easier than the sutured PCIOL surgical technique. Double triangle fixation also provides a better support for PCIOL and might result in less tilting problems.

**Keywords:** scleral fixation, intraocular lens, aphakia, posterior capsule

### INTRODUCTION

There are several options for intraocular lens (IOL) implantation while dealing with cases with little or no capsular support.<sup>1</sup> Anterior chamber intraocular lenses (ACIOLs) are easier to be implanted; therefore, they were the implant of choice before the early 1980s until

evidence showed that ACIOLs were related to complications like angle damage, endothelial loss, cystoid macular edema (CME), and peripheral synechiae.<sup>2-12</sup>

Though the modernly designed iris supported ACIOLs ("lobster-claw" style ACIOLs) made significant improvement and regained their popularity, certain concerns still remained.<sup>1</sup>

Posterior chamber intraocular lenses (PCIOLs), on

---

Received: April, 12, 2007. Revised: May, 16, 2007. Accepted: May, 24, 2007.

Department of Ophthalmology, Chang Gung Memorial Hospital

Correspondence and reprint requests to: Jiahn-Shing Lee Department of Ophthalmology, Chang Gung Memorial Hospital, No. 5, Fu-Hsing Street, Kweishan, Taoyuan, Taiwan. 333

E-mail: [leejsh@adm.cgmh.org.tw](mailto:leejsh@adm.cgmh.org.tw)