

# Diode Laser Transscleral Cyclophotocoagulation for the Treatment of Secondary Glaucoma

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## ABSTRACT:

**Objectives:** To evaluate the effect of diode laser transscleral cyclophotocoagulation (TSCPC) in eyes with secondary glaucoma in a tertiary care hospital in Karachi, Pakistan.

**Subjects and Methods:** This is a retrospective chart review of 41 eyes of 36 patients who underwent TSCPC for secondary glaucoma during May 2013 and October 2014. We are assessing the success rate of the treatment (proportion of eyes achieving an IOP reduction of  $\leq 22$ mmHg with or without medication) and reduction in the mean number of glaucoma drugs used.

**Results:** The mean age at TSCPC is  $47 \pm 20$  years (12-85). The mean follow-up range is 4 to 6 months. The indications for TSCPC are silicone oil induced glaucoma (19 eyes), advanced glaucoma (9), rubeotic glaucoma (non CRVO) (4), neovascular glaucoma (1), post-PKP glaucoma (1), CRVO (3), post traumatic glaucoma (2), juvenile glaucoma (1) and congenital glaucoma (1). The mean ( $\pm$ SD) pre-TSCPC IOP was 38.4 (9.4) mmHg (range 21–58 mmHg). This is reduced to 16.3(8.5) mmHg (range 4–50) at six weeks after TSCPC. Overall, 35 of 42 (83.3 %) eyes have achieved an IOP of  $\leq 22$ mmHg as a result of TSCPC. The average number of anti-glaucoma drugs used, are decreased from 3 to 1.

**Conclusion:** Our study supports previous findings that TSCPC is an effective means of controlling IOP in patients with secondary glaucoma. *Al-Shifa Journal of Ophthalmology* 2016; 12(4), 183-188. © Al-Shifa Trust Eye Hospital, Rawalpindi.

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