

# Causes of Neovascular Glaucoma and its final outcome in a Glaucoma clinic

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## Abstract

**Aims:** To determine the frequency of causes of neovascular glaucoma (NVG) and effects of treatment on intraocular pressure (IOP).

**Study Design:** Observational cross-sectional study.

**Methods:** Forty seven eyes of 47 patients were observed and duration of the study was six months from 1<sup>st</sup> July 2015 to 31<sup>st</sup> December 2015. All the patients of NVG presented to glaucoma clinic were included by consecutive non-probability technique. Only those patients were included who have taken treatment for NVG and were stable for at least one month.

**Results:** A total of 47 eyes of 47 patients with NVG were included. Of total 47, 34 (72.3%) were male and 13 (27.7%) were females. Proliferative diabetic retinopathy was the most common cause of NVG with frequency of 44.7% followed by central retinal vein occlusion (31.9%), retinal detachment (14.9%), end-stage glaucoma (4.3%), uveitis (2.1%) and retinal vasculitis (2.1%). Maximum patients (74.5%) received topical medical treatment followed by diode trans-scleral laser cycloablation (DLCA) (70.2%), intravitreal bevacizumab (29.8%), pan-retinal photocoagulation (23.4%) and pars plana vitrectomy (4.3%). There was significant reduction in IOP ( $p < 0.001$ ) after treatment with mean pre-treatment IOP of  $39.72 \pm 12.44$  mm of Hg to post-treatment final IOP of  $18.30 \pm 8.43$  mm of Hg.

**Conclusion:** PDR was the found to be the most common cause of NVG in our setup and IOP was well controlled with multiple treatment options. *Al-Shifa Journal of Ophthalmology 2015; 11(2): 62-66. © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.*

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