PRELIMINARY REPORT ON EFFECT OF SELECTIVE LASER TRABECULOPLASTY (SLT) IN TREATMENT OF OPEN-ANGLE GLAUCOMA

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Purpose: To report the intraocular pressure (IOP) reduction following selective laser trabeculoplasty (SLT) in open angle glaucoma (OAG).

Method: A retrospective, nonrandomized, interventional case series was carried out. Consecutive OAG patients underwent SLT; the same preoperative medical regimen was maintained during follow-up. Data collected included age, gender, phakic or pseudophakic eye, laser power and number of laser spots, previous surgery, pre- and postoperative IOP, number of glaucoma medications, and surgical complications. Post-treatment assessments were scheduled at 1 week and month 1, 2, 3, 4, 5, and 6.

Results: A total of twenty eight patients with fifty six eyes were enrolled. We found the average prelaser IOP was 21.3±3.7 mmHg and the average postlaser IOP was 17.2±3.7 mmHg at sixth months. The mean IOP reduction is 3.5 mmHg (P<0.05) at last visit. Successful treatment was defined as IOP reduction more than 20% or at least one kind of anti-glaucomatic agent withdrawal. Overall success rate was 40%. No major complication was found.

Conclusions: Our study showed that SLT could provide a safe and effective outcome in treating OAG patients. Pre-laser IOP is positively correlated with IOP reduction. (P<0.05).

Key words: selective laser trabeculoplasty, open angle glaucoma

INTRODUCTION

Glaucoma is the second leading cause of blindness worldwide, with Asians accounting for approximately half of the world’s glaucoma cases. It is a progressive neuropathy localized in the optic nerve that may lead to blindness. Primary open-angle glaucoma (POAG) is the most commonly reported type of glaucoma. Treatment should be directed at lowering intraocular pressure (IOP) for preventing progressive glaucomatous optic neuropathy. Classical treatment for OAG includes...