

Selective laser trabeculoplasty after canaloplasty improves the efficacy of intraocular pressure reduction in eyes with open angle glaucoma

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Purpose: To assess the impact of Selective Laser Trabeculoplasty (SLT) after canaloplasty in reducing the intraocular pressure (IOP) among patients with open angle glaucoma.

Methods: In this case series study, eyes with open angle glaucoma were first operated with Canaloplasty. During post operative follow up, SLT was done as an additional intervention. Post operative assessment of IOP was done in the first day, first week, one and two months follow up visits successively. Mean IOP was compared across different follow ups.

Results: Six eyes were consecutively recruited, the mean (\pm SD) age was 56.7 (\pm 6.3). The mean IOP was 34.2 (\pm 2.6) mmHg, vertical cup/disc ratio (CDR); 0.61 (\pm 0.17), log MAR visual acuity; 0.87 (\pm 0.12), anti-glaucoma medications was 2.4 (\pm 1.3). After Canaloplasty surgery, the mean IOP decreased from a value of 23.5 (\pm 3.9) to 14.8 (\pm 2.6) after two postoperative months and this decrease was statistically significant ($p=0.027$). The mean IOP also significantly decreased from pre SLT intervention of 16.2 (\pm 2.3), to 13.8 (\pm 1.7) postoperatively. Combining both interventions the total decrease was 9.7 (41.3%) mmHg which was statistically significant ($p=0.027$).

Conclusion: Combined Canaloplasty and SLT have a significant reduction in IOP among open angle glaucoma patients.