



NON PENETRATING DEEP SCLERECTOMY WITH EXTERNAL TRABECULECTOMY (NPT) VERSUS TRABECULECTOMY : A 4 YEAR PROSPECTIVE STUDY

Y. Lachkar, P. Demailly

Hôpital Saint-Joseph, Institut du Glaucome- Paris - France

Purpose: This study was designed to assess the efficacy, safety and results of Non Penetrating deep sclerectomy (NPT) compared to external Trabeculectomy.

Design: Randomised clinical trial

Participants: Thirty-six eyes of eighteen patients with uncontrolled open-angle glaucoma

Intervention: NPT, a filtering procedure in which the internal wall of Schlemm's canal is excised without actually entering the anterior chamber, was done in one eye and trabeculectomy (TBC) in the fellow eye by one surgeon. The specific procedure for each eye was determined by randomisation.

Main Outcome Measures: Postoperative IOP, number and duration of glaucoma medications.

Results: Mean preoperative intraocular pressures were 26.05 mm Hg in the NPT group and 26.8 mm Hg in the TBC group. The number and duration of glaucoma medications were similar in both groups. Mean IOP at 3,6 and 12 months, 2 year, 3 year and 4 year were respectively: 13.8,15.6,16.6, 16.1,16.0, 16.0 mm Hg in the NPT group and 12.8,13.9,15.8, 15.9, 16.0, 16.1 mm Hg in the TBC group. Success rate at 4 year defined as an IOP < or = to 21 mm Hg was 77.7 % in the NPT group and 83.3% in the TBC group. No significant complications were noted in either group. The incidence of cataract was similar in both groups.

Conclusion: Non-penetrating trabeculectomy is a safe filtering procedure. The level of IOP obtained (including patients having Nd:Yag goniopuncture) was similar to that of trabeculectomy.