Trabeculectomy: long term efficacy results in two types of glaucoma
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Purpose: Although trabeculectomy is the standard surgical treatment of glaucoma, there are few studies comparing the results between the different glaucoma types. The authors pretend to evaluate long term intraocular pressure results after trabeculectomy in chronic open angle glaucoma (COAG) and pseudoexfoliative glaucoma (PSXG).

Methods: A retrospective follow-up study of 150 patients submitted to trabeculectomy by the same surgeon was made; 67 cases with a minimum 2 years follow-up were selected, 21 COAG eyes and 28 PSXG eyes. A comparative study was made concerning intraocular pressure (IOP), number of medicines (NM) and complete and qualified success defined as IOP≤18 mm Hg in the preoperative time, 1, 3 and 6 years after the surgery. Success rates were determined using Kaplan-Meier survival curve.

Results: Preoperative IOP was 25.8mmHg in COAG and 27.0mm Hg in PSXG and significantly decreased (p < 0.05) to: 16.2 ± 3.1 vs 13.8 ± 3.5 mmHg in the 1st year, 16.3 ± 5.0 vs 13.6 ± 3.8 mmHg in the 3rd year and 17.1 ± 3.4 vs 13.3 ± 5.1mmHg in the 6th year after surgery respectively. The NM significantly decreased (p < 0.05) from 3.3 ± 0.7 (COAG) and 3.2 ± 0.7 (PSXG) to: 0.75 ± 1.2 vs 0.8 ± 1.1 in the 1st year, 1.1 ± 1.4 vs 1.3 ± 1.4 in the 3rd year and 2.0 ± 1.6 vs 1.2 ± 1.3 in the 6th year of follow-up. Success rates decreased with time: complete success was respectively in COAG and PSXG of 55.0% vs 55.6% in the 1st year, 47.4% vs 33.3% in the 3rd year and 20% vs 42.9% in the 6th year and qualified success was 75.0% vs 88.9% in the 1st year, 84.2% vs 83.3% in the 3rd year and 70.0% vs 92.9% in the 6th year, respectively, with no intergroup difference (p > 0.05). Mean survival times for complete success was 69.7 ± 7.1 (COAG) and 82.5 ± 7.9 (PSXG) months (p = 0.69) and for qualified success was 98.8 ± 4.7 (COAG) and 109.3 ± 5.3 (PSXG) months (p = 0.63).

Conclusions: Trabeculectomy is an efficient technique in long term tensional control of COAG and PSXG.