

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo PIBIC (X)
Colaborador Last Name - Tavares First Name - Ivan Middle - Maynard

Service (sector) GlaucomaNº CEP

CHANGES IN ANATOMICAL AND FUNCTIONAL GLAUCOMA EVALUATION AFTER TRABECULECTOMY

Ivan Maynard Tavares, MD, PhD; Luiz Alberto S Melo Jr, MD; João A. Prata Jr, MD; Augusto Paranhos Jr, MD; Paulo Augusto A. Mello, MD. **Purpose:** To assess the influence of glaucoma filtration surgery on anatomical and functional tests for glaucoma evaluation.

Methods: Twenty-five eyes (25 patients) with primary open-angle glaucoma were evaluated, prospectively. Data were collected on vision acuity, intraocular pressure, standard automated perimetry, frequency doubling technology perimetry, scanning laser polarimetry (GDx) and confocal scanning laser ophthalmoscopy (HRT II) before and 3-6 months after surgery.

Results: Mean (\pm standard deviation) pre and postoperative visual acuities (logMAR) were 0.28 (\pm 0.18) and 0.30 (\pm 0.17), respectively ($P = 0.346$). In a mean time of 4.5 (\pm 1.1) months after surgery, the mean preoperative intraocular pressure of 20.7 (\pm 5.4) mmHg decreased to 11.04 (\pm 2.52) mmHg ($P < 0.001$). The results of the standard automated perimetry, frequency doubling technology perimetry, scanning laser polarimetry and confocal scanning laser ophthalmoscopy diagnostic methods revealed no significant difference ($P > 0.162$) between pre and postoperative values and no significant correlation ($P > 0.296$) between intraocular pressure reduction and value changes.

Conclusion: No significant change on any test variable was detected after glaucoma filtration surgery. Trabeculectomy does not appear to influence standard automated perimetry, frequency doubling technology perimetry, scanning laser polarimetry and confocal scanning laser ophthalmoscopy (HRT II) results after a 4.5-month period of surgery.

Key-words: glaucoma, trabeculectomy, visual field, nerve fiber, optic disc. **Support:** CAPES and FAPESP.