

Poster Abstracts

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Surgery/Lasers/Tonometry

102 Clinical Results of Endocyclophotocoagulation in Glaucoma Refractory



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Purpose/Relevance

Clinical results of endocyclophotocoagulation (ECF) surgery, valuing changes in intraocular pressure (IOP), visual acuity (A.V), reduction of drugs and surgical complications during a year of follow-up.

Methods

Retrospective interventional case series of 50 eyes diagnosed with medically uncontrolled glaucoma who underwent surgery ECF, between 2014 and 2015 in the Oftalmosalud Institute in Lima. Track 1, 6 and 12 months, 24 months was performed, evaluating the A.V, IOP, antiglaucoma medication and early and late surgical complications. Inclusion criteria were patients with open-angle glaucoma, angle closure glaucoma associated with cataract, narrow-angle glaucoma associated with plateau iris, penetrating keratoplasty glaucoma secondary to that presented IOP greater than or equal to 21 mmHg not controlled maximal medical therapy, besides being pseudophakic and history of previous trabeculectomy with or without antimetabolites or valvular drainage device. Exclusion criteria were less follow-up 24 months after surgery NPL or endocyclophotocoagulation. Surgical success was defined as less than or equal to 21 mmHg and greater than or equal to 6 mmHg with or without antiglaucoma agent PIO.

Results

The sample included 50 eyes of 39 patients with different subtypes of glaucoma with a mean age of 65.00 years (18-93). Preoperative mean IOP was 22.3 ± 8.73 mmHg. The mean IOP post operative for the first month was 14.80 ± 5.57 mmHg; At 6 months of 14.28 ± 4.65 mmHg, a year of 14.28 ± 4.01 and two year of 13.02 ± 4.01 . The anti-glaucoma medications increased from 2.08 ± 0.88 preoperatively to 2.2 ± 0.87 in the first year after surgery. The V.A was stable without significant change. The follow-up showed a reduction in mean IOP of 22.3 mm Hg to 13.96 ± 2.73 (37.3%) ($P = 0.000$) in the first year. However the reduction in the use of antihypertensive drugs in the ECF group was 9.32% (pre post 2.08 1.60) ($P 0.016$). Within Choroidal bleeding complications (1.9%), pupillary membrane (3.8%) and hypertensive Peak 50 mmHg (1.9%).

Discussion

The endocyclophotocoagulation is a technique that combines cyclodestruction and endo visualization of the ciliary processes to decrease the production of aqueous humor and in this way decrease the intraocular pressure. Its main advantage over other techniques is that it allows us to visualize the ciliary processes at the time of allowing cycloablation be sure intraoperatively that meets the objective is achieved and reduce the number of complications. In our study it was evident a decrease of the intraocular pressure statistically significant that persists up to two years follow-up.

Conclusion

Our results suggest that the ECF provides a safe and adequate IOP lowering preserving visual acuity, with a very low rate of complications and reoperations, which can be performed alone or combined with cataract surgery.

GRAFICO LINEAL DE NUMERO DE GOTAS

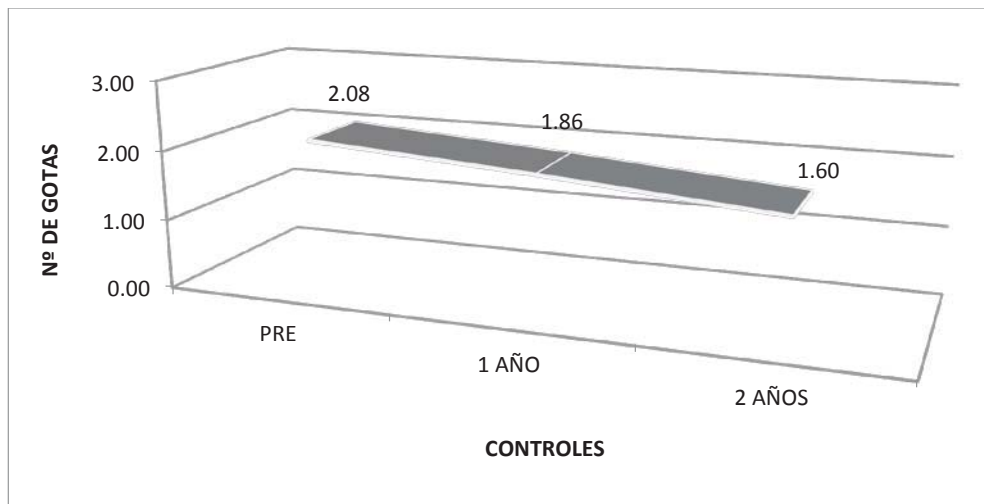
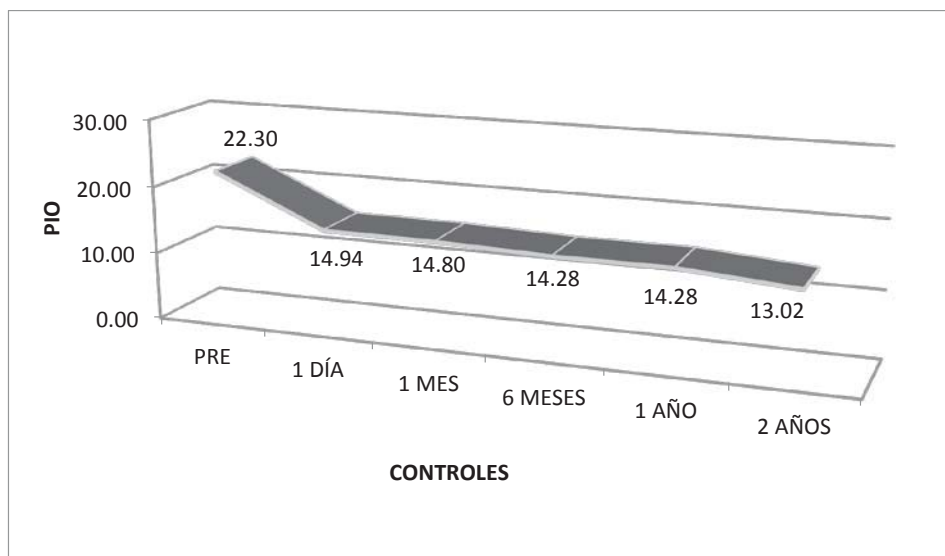


GRAFICO LINEAL DE LAS PIOS



References

- Berlin MS. Miscellaneous laser procedures including laser ciliary body therapy. In: Stamper R, Lieberman MF, Drake MV, editors. *Becker-Shaffer's Diagnosis and Therapy of the Glaucomas*. 8th ed. Philadelphia, PA: Mosby-Elsevier; 2009. p. 456-7.
- Khan, M. T., & Qazi, Z. A. (2007). Transscleral diode laser cyclophotocoagulation for the treatment of refractory glaucoma. *Pak J Ophthalmol*, 23(4).
- Čanadanović, V., Tušek-Lješević, L., Barišić, S., Miljković, A., Bedov, T., & Babić, N. (2014). Effect of diode laser cyclophotocoagulation in treatment of patients with refractory glaucoma. *Vojnosanitetski pregled*, 72(1).
- Murphy CC, Burnett CAM, Spry PGD, et al. A two centre study of the dose-response relation for transscleral diode laser cyclophotocoagulation in refractory glaucoma. *Br J Ophthalmol*. 2003; 87: 1252-7.