

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
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Service (sector) Glaucoma N° CEP

COMPARISON OF SILICONE AHMED AND BAERVELDT GLAUCOMA IMPLANTS IN REFRACTORY GLAUCOMA

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Purpose: To compare the safety and efficacy of the silicone-Ahmed Glaucoma Implant (S-AGI) and Baerveldt Glaucoma Implant (BGI) in the treatment of refractory glaucoma. **Methods:** 148 eyes of 141 patients who underwent either BGI (350 mm²) or S-AGI (model FP-7) implantation with a minimum follow-up of 6 months were included. Primary outcomes were intraocular pressure (IOP), the rate of postoperative complications, and surgical success (IOP reduction of $\geq 20\%$ from baseline and IOP > 5 mmHg and < 22 mmHg). Eyes requiring additional glaucoma surgery, implant removal or who lost light perception were also considered surgical failures. **Results:** 76 eyes receiving BGIs and 72 eyes receiving S-AGIs were included. The baseline IOP was similar in the two groups ($p=0.94$). The mean postoperative IOP was lower in the S-AGI group at 1-day (10.4 vs 14.9 mmHg, $p<0.04$) and was lower in the BGI group at 1-year (11.6 vs 16.0 mmHg, $p<0.001$). No significant difference in the success rate was seen between the 2 groups ($p>0.09$). The number of postoperative glaucoma medications was greater in the S-AGI group, but the difference was not statistically significant ($p>0.03$). The occurrence of hypotony (IOP ≤ 5 mmHg) was greater in the BGI group (64.5% vs 37.5%, $p=0.002$), as well as the rate of postoperative complications (22.3% vs 6.9%, $p=0.01$).

Conclusion: Similar rates of surgical success were achieved with both the BGI and the S-AGI. The BGI yielded a lower 12-month postoperative IOP and fewer glaucoma medications. However, the BGI is associated with a greater likelihood of developing ocular hypotony and postoperative complications.