FREE
ARVO Annual Meeting Abstract | June 2015

Is trabecular sugery (Hydrus-Ivantis) really safe? Operative and post-operative complications of a single site clinical group

Antonio Maria Fea; Giulia Consolandi; Paola cannizzo; giulia pignata; Carlo Lavia; Teresa Rolle

+ Author Affiliations & Notes

Investigative Ophthalmology & Visual Science June 2015, Vol.56, 2684. doi:

Abstract

Purpose: Trabecular surgery has been introduced to overcome the complications of traditional glaucoma surgery (trabeculectomy, shunt surgery). To evaluate clinically the number and type of complications of a new trabecular bypass in a one site clinical group of phakic patients.

Methods: Intraoperative complications of phakic patients undergoing consecutive trabecular stent implantation (Hydrus-Ivantis) by a single surgeon were evaluated. The patients were evaluated at 1 month, 3 months and at 1 year considering visual acuity, visual field, and gonioscopy.

Results: 41 caucasic patients (12 males and 29 females) with a mean age of 67.4 ± 8.5 years (range: 49-84) were included in the study. All patients had a diagnosis of primary open angle glaucoma with a mean visual field MD of -4.4 and a PSD of 4.3. The mean cup to disk ratio was 0.7 ± 0.2. Pre-operative BCVA was 20/23, the mean medicated IOP was 19.8± 3.4 and the mean number of medications was 1.6. At the end of surgery two patients presented a hyphema (>2mm). In one patient, the stent was repositioned during the surgical procedure. 36 patients were followed up to 3 months and 33 up to one year. The IOP decreased to 17,5 ± 3.3 at three months and to 18 ± 3.2 at one year. At 3 months 19,4% and at one year 42,4% of the patients were medicated (mean number of medications: 0.4 and 0.9 respectively). During the follow up no patient had a BCVA loss ≥ 2 Snellen lines. Cup disk ratio and visual field MD were not statistically significant compared to baseline. In 6 patients new peripheral anterior synechiae (PAS) were observed. The occurrence of PAS did not modify the IOP nor required additional medical or surgical therapy.

Conclusions: The Hydrus trabecular stent allowed a significant reduction of therapy in this group of phakic patients, with 57,6% unmedicated patients up to one year. The mean number of medications decreased significantly compared to baseline (1.6 vs 0.9; $p<0.05$). Mild intraocular complications were observed. During the follow-up, some patients developed peripheral anterior synechiae which did not seem to be clinically significant.