Safety outcomes of intravitreal implant of fluocinolone acetonide 0.19 mg in clinical practice assessed by intraocular pressure measurement

Aim: The use of intravitreal corticosteroids (IVT) in the treatment of diabetic macular edema (DME) increased in recent years. It is a common complication of intravitreal steroids in secondary ocular hypertension (OHT), which can occur immediately as a consequence of increased intraocular volume or later due to increased outflow resistance. Most cases of OHT are clinically manageable. The aim of this study was to determine rise of intraocular pressure (IOP) in DME patients treated with fluocinolone acetonide (FAc) 0.19 mg intravitreal injection.

Methods: 107 FAc-treated eyes of 92 diabetic patients with chronic DME were analyzed retrospectively. IOP was assessed at baseline, week 2-4, month 3, month 6, month 9 and 1 year after FAc implantation. All patients included in this study, which adhered to the tenets of the Declaration of Helsinki, gave their informed consent.

Results: At baseline mean IOP was 15.59±3.50 mmHg (mean±standard deviation). At week 2-4, month 1, 3, 6, 9 and month 12 it was observed an IOP value of 16.37±4.06 mmHg (mean±standard deviation), 17.61±4.87 mmHg (mean±standard deviation), 16.19±3.81 mmHg (mean±standard deviation), 18.00±4.63 mmHg (mean±standard deviation), and 18.00±5.20 mmHg (mean±standard deviation), respectively (p<0.0001). The mean IOP change from baseline to 3, 6, 9 months and 1 year was 0.8, 2.1, 0.8, 2.2 and 1.9 mmHg, respectively. At baseline, 75% of patients reported as not taking IOP lowering medication vs. 25% of patients who were already taking medication for this indication. At the end of the 12-month follow-up, 15% of the patients started IOP lowering medication. No patients required incisional surgery for OHT.

Conclusions: In our study, most of the eyes treated with FAc implant remained controlled, with no significant concerns due to IOP changes. About 15% of the patients started IOP lowering medication after implantation which is lower than the reported 18.4% of the IRISS study and 22.0% of the FAME study. These results appear to be in line with other IOP results observed in clinical practice in Europe and below the results reported in FAME studies, with lower IOP increase and a lower surgical rate. Steroid-induced OHT should not be considered a problem as long as patients remain correctly monitored and treated.

Biography
Jose Antonio Dias was born on June 11, 1966, in Caracas, Venezuela. Graduated from the Faculty of Medicine, University of Coimbra - Portugal, completed his training as an ophthalmologist at the Institute of Ophthalmology Dr. Gama Pinto – Lisbon - Portugal, being accepted as a member of the College of Ophthalmology in 1997. He participated in 192 research and scientific presentations (141 as lead author), and co-authored three books devoted to glaucoma. He participated in a variety of scientific training courses aimed at ophthalmologists (252), residents formation (48), health technicians (16) and public enlightenment and social media sessions (currently keeps a monthly collaboration with national television to present issues related to eye health). Currently performs his medical activity in Malo Clinic (where is Clinical Director), in Joaquim Chaves Health Group (which is the coordinator of the Department of Ophthalmology) and CUF Hospital, working in consultation, diagnostics, surgery and medical education. Provides technical advice to several companies linked to the health area and still in regulatory institutions. Its main area of interest is the study of glaucoma, which has dedicated his research activity and scientific dissemination to the following fields:

- basic science and glaucoma
- early diagnosis
- risk indicators
- compliance and persistence

jose.ant.dias@gmail.com