What is driving the decision to perform a filtering procedure for glaucoma in clinical practice?

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Purpose: To assess what is driving the decision to perform a filtering procedure in a patient suffering from glaucoma.

Methods: Retrospective study in one single University centre with one glaucoma specialist. All the indications for filtering glaucoma surgeries (alone or combined with cataract extraction) undertaken during 2013 with the same surgeon were reviewed. The indications were as follows: clinical evaluation of the optic disc, visual field progression, progression on imaging (OCT and HRT), poor tolerance to medical treatment, non controlled intraocular pressure (IOP) and cataract.

Results: During this period, 159 filtering surgeries were performed on 135 patients (73 women) with a median age of 69 (32-87) years. The types of glaucoma were primary open angle glaucoma (75%, n = 120), primary angle closure glaucoma (10%, n=16) and secondary glaucoma (14%, n = 23). The types of surgeries were as follows: trabeculectomie (n = 78), deep sclerectomy (n= 9), trabeculectomy and phacoemulsification (n = 24), deep sclerectomy and phacoemulsification (n = 45) and tubes (n = 3). The indications were mainly driven by a non controlled IOP (50%, n = 81), a cataract requiring lens extraction (13 %, n = 21), a visual field progression (13 %, n = 20), clinical evaluation of the optic disc (13 %, n = 19), a poor tolerance to medical treatment (11 %, n = 17) and a progression on imaging (1%, n = 1).

Conclusion: The indications for glaucoma surgery may be highly variable according to the country, the practice and the surgeon. A multicentre study should be useful to better define what is driving the indications for glaucoma surgery.