Preoperative characteristics of glaucoma surgery patients in Eye clinic of Lithuanian University of Health Sciences

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PURPOSE:
to evaluate preoperative characteristics and type of surgery of patients undergoing glaucoma surgery in Kaunas Eye clinic of Lithuanian University of Health Sciences.

METHODS:
retrospective analysis of the records of the patients who were operated for glaucoma from January to June 2011.

RESULTS:
data obtained from 154 glaucoma surgery patients were included into the study. The age range was from 20 to 93, (average 66.9 ±12.4), 57.1% (88) men, 42.9% (66) women. Open angle glaucoma was in 84.4% (130), closed angle in 10.4% (16), other types of glaucoma - 5.2% (8). Pseudoxefioliation syndrome was observed in 42.9% (66) of the patients. Visual field evaluation before the surgery using standart automated perimetry or frequency doubling perimetry was performed in 64.3% (99) of all the operated patients, not tested 35.7% (55)(Figure 1). The initial stage of glaucoma was in 3.2% (5), moderate- 28.6% (44), advanced – in 68.2% (105)(Figure 2). Preoperative intraocular pressure < 26mmHg was in 37.7% (58), 26- 30mmHg- 16.9% (26), 31- 40mmHg- 11.7% (18), >41mmHg- 33.7% (52)(Figure 3). The known duration of glaucoma medical treatment from 1 to 5 years was in 53.9% (83), from 5 to 10 years - 25.3% (39), >10 in 16.2% (25). The duration of glaucoma treatment unknown in 4.6% (7)(Figure 4). No medical treatment was in 3.2% (5) (medications were not tolerated). Medical treatment with one medication preoperatively - in 4.6% (7), two medications in 24.7% (38), three in 35.7% (55), four in 31.8% (49)(Figure 5). Trabeculectomy was performed in 61.0% (94), trabeculectomy using 5-FU in 18.2% (28), combined phaco – trabeculectomy -4.6% (7), Schlemm canal surgery - 12.4% (19), combined Schlemm canal – phaco procedure -3.2% (5), revision of trabeculectomy site in 0.6% (1).

CONCLUSIONS:
• Most of the patients were operated in the advanced stage of the disease and with the maximum medical treatment
• Majority of the patients had preoperative IOP >30mmHg
• IOP as the risk for glaucoma instability was the main factor for making decision for glaucoma surgery
• VF testing in one year before surgery was not performed as the routine examination before the surgery
• Careful evaluation of glaucoma progression using functional/structural analysis could increase glaucoma surgery in moderate or initial stage of the disease and could delay the onset of more advanced glaucoma process.

References:
2. Anne L. Coleman, MD, PhD, Fei Yu, PhD, Susannah Rowe, MD, MPH. Visual field testing in glaucoma medicare beneficiaries before surgery. Ophthalmology 2005;112:401-406