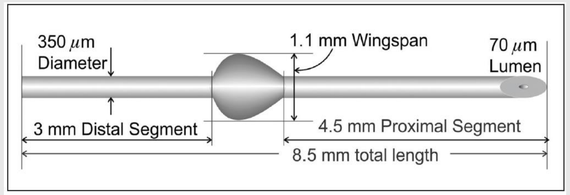
One year outcome of Preserflo Microshunt in a District General Hospital

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INTRODUCTION

- Trabeculectomy is considered the gold standard surgical treatment for glaucoma despite requiring significant postoperative management and some potentially sight threatening complications. [1]
- Several Minimally Invasive Glaucoma/Bleb Surgery (MIGS/MIBS) procedures including the Preserflo MicroShunt (Figure 1) have recently been introduced as safer and less traumatic options.

Figure 1: Preserflo MicroShunt



METHOD

- A retrospective analysis of consecutive Preserflo MicroShunts performed between July 2021 and December 2022 at our hospital. Success was defined as IOP < 21 mm Hg with (qualified success) or without any medication (absolute success).
- Data on intraocular pressure (IOP), number of glaucoma medications, LogMAR visual acuity & visual field loss was collected.

RESULTS

- A total of 81 Preserflo MicroShunts had twelve month post operative data and were included in the study. The procedure was performed on different types of glaucoma (Figure 2). Four patients had previous glaucoma surgery, one had a previous corneal graft.
- The absolute success was 88% and the qualified success was 97.6%. Mean preoperative IOP was 25.36 mm Hg (range 14-58 mm Hg) and post operatively IOP was 11.37 mm Hg (range 3-24 mm Hg) at one year (Figure 3).
- The mean number of glaucoma medications was 2.33 (range 1-5*) preoperatively and 0.17 (1-3) post operatively (n=8) (Figure 4). *Oral Acetazolamide was counted as medication
- The mean LogMAR visual acuity was 0.2 (-0.1 to 1.2) preoperatively and 0.2 (range -0.1 to 1.3) post-operatively.
- Visual Field Test were available in 77 eyes with a mean deviation of -9.77 preoperatively and -9.58 postoperatively.
- Five patients required revision surgery. One further patient had revision surgery beyond 12 months
- One patient had exposure of the Preserflo MicroShunt and this was explanted.

Figure 2: Types of Glaucoma

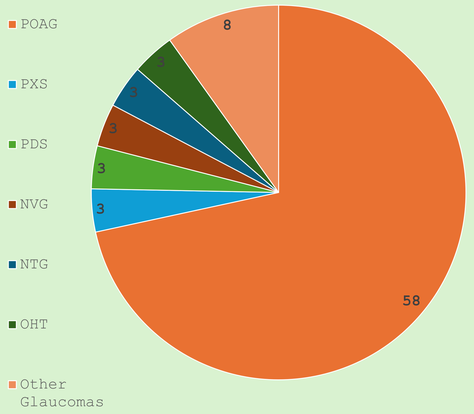


Figure 3: Mean IOP (mmHg)

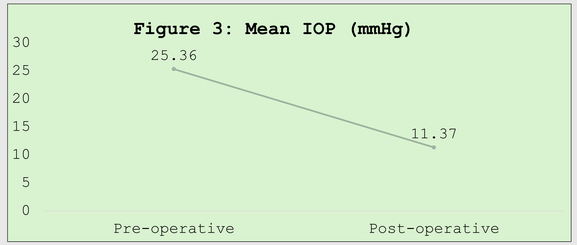
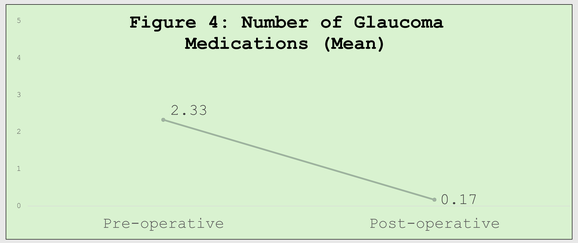


Figure 4: Number of Glaucoma Medications (Mean)



CONCLUSION

- Our results compare very favourably with published literature. [2,3]
- This may be due to several factors eg preoperative use of preservative free drops and discontinuation of blood thinners, dose of Mitomycin C used intraoperatively (0.4mg/ml) and the use of Prednisolone acetate 1% eye drops two hourly for a prolonged postoperative period (up to two months).

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