Real-world Early Data on the Effectiveness and Safety of Preserflo™ Microshunt

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Purpose

To present the real-world early data on the effectiveness and safety of Preserflo™ Microshunt in two UK eye units

Design

Retrospective, interventional case series

Methods

Consecutive patients who underwent Preserflo™ Microshunt with Mitomycin C (0.2-0.4mg/ml) at York Hospital and Scarborough General Hospital were included. Main outcome measures were mean change in intraocular pressure and number of hypotensive medications from pre-op to 6-month follow-up. Success was defined as IOP ≤18mmHg and at least 20% IOP reduction from pre-op without any hypotensive medication (complete success) or with hypotensive medication (qualified success) at month-6. Patients with clinical hypotony requiring intervention, those who require further glaucoma surgery or reoperation were considered a failure. The safety analysis included incidence of adverse events and requirement for needling or surgical revision.

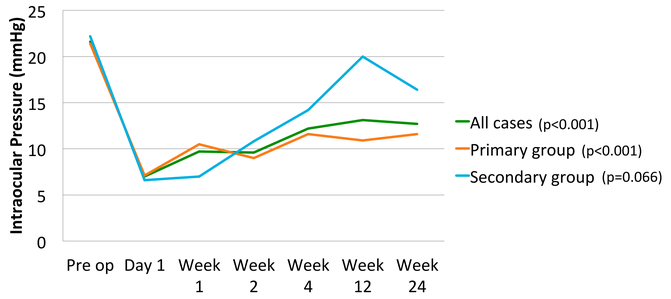
Results

- Twenty-two eyes of 18 patients (mean age 79 years; range 51-92).
- Diagnoses – 19 primary open angle glaucoma, 3 normal tension glaucoma

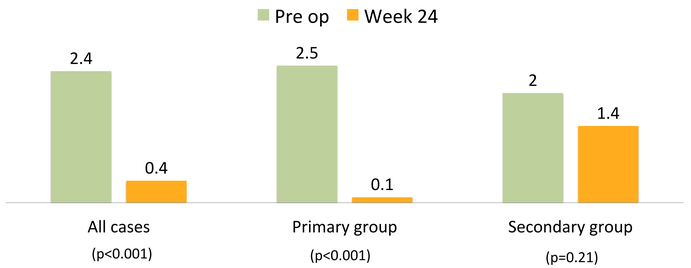
Results

- 17 cases are primary Microshunt (surgically naïve) and 5 cases are secondary Microshunt (3 previous trabeculectomy, 1 previous cyclodiode and 1 previous Xen implant)

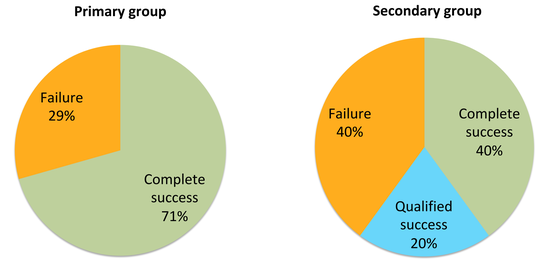
IOP reduction from pre-op to 6-month post-op



Medications reduction from pre-op to 6-month post-op



Operative success at 6-month post-op



All NTG cases in primary group failed because of insufficient IOP reduction at 6-month. Complete success rate in primary group would be 85.7% if NTG cases were excluded.

Post-op intervention/Complication	All cases (%)	Primary group	Secondary group
Bleb needling/subconjuntival 5 FU injection	7 (31.8)	4	3
Hypotony requiring AC reformation	2 (9%)	1	1 *
Microshunt explantation	1 (4.5%)	0	1 **

* previous cyclodiode
** previous trabeculectomy

Conclusions

Preserflo™ Microshunt seems to be effective in lowering the IOP and the number of hypotensive medication at 6-month postoperatively. Patients with normal tension glaucoma and those with previous trabeculectomy and cyclodiode had less favourable IOP reduction.