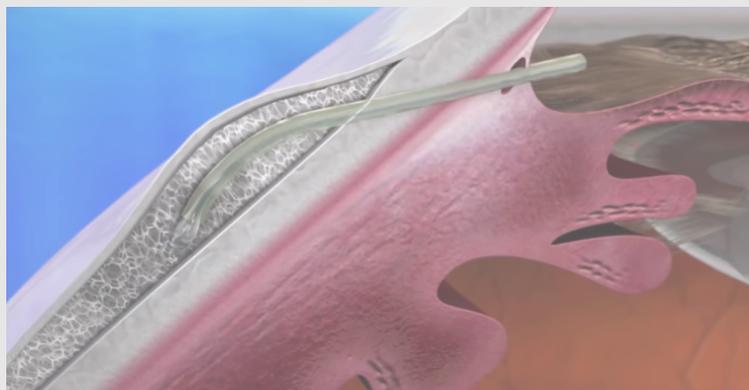


Planned 3 week 5-FU injection following XEN Gel Stent: reducing the need to needle?

Claudia Quijano, Shaista Giny, Dan Lindfield

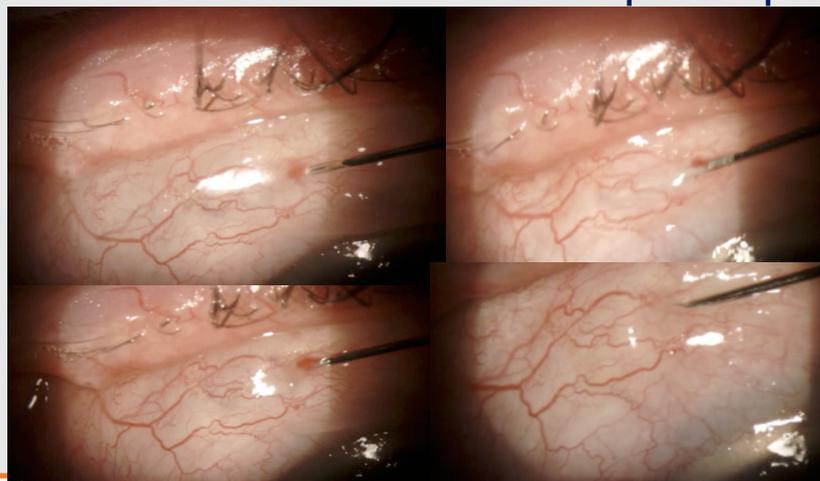
Introduction:

Efficacy data after XEN stent implantation suggests IOP outcomes between 12-14 mmHg are achievable. However it is not a "fit and forget" implant. Despite: (i) careful case selection, (ii) preoperative ocular surface optimization and (iii) intensive post-operative steroid regimens, needling rates have been reported as high as 36-52% - which we thought is not acceptable.



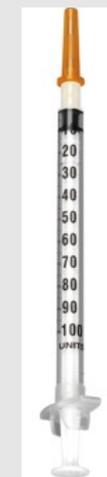
Background:

General recommendations for preoperative assessment, surgical technique and postoperative follow-up have been published, however few guidelines for bleb failure are available. Predicting which patient will require needling and when is difficult. In our patients we started to see fibrosis in the XEN bleb between 4-8 week post-op.

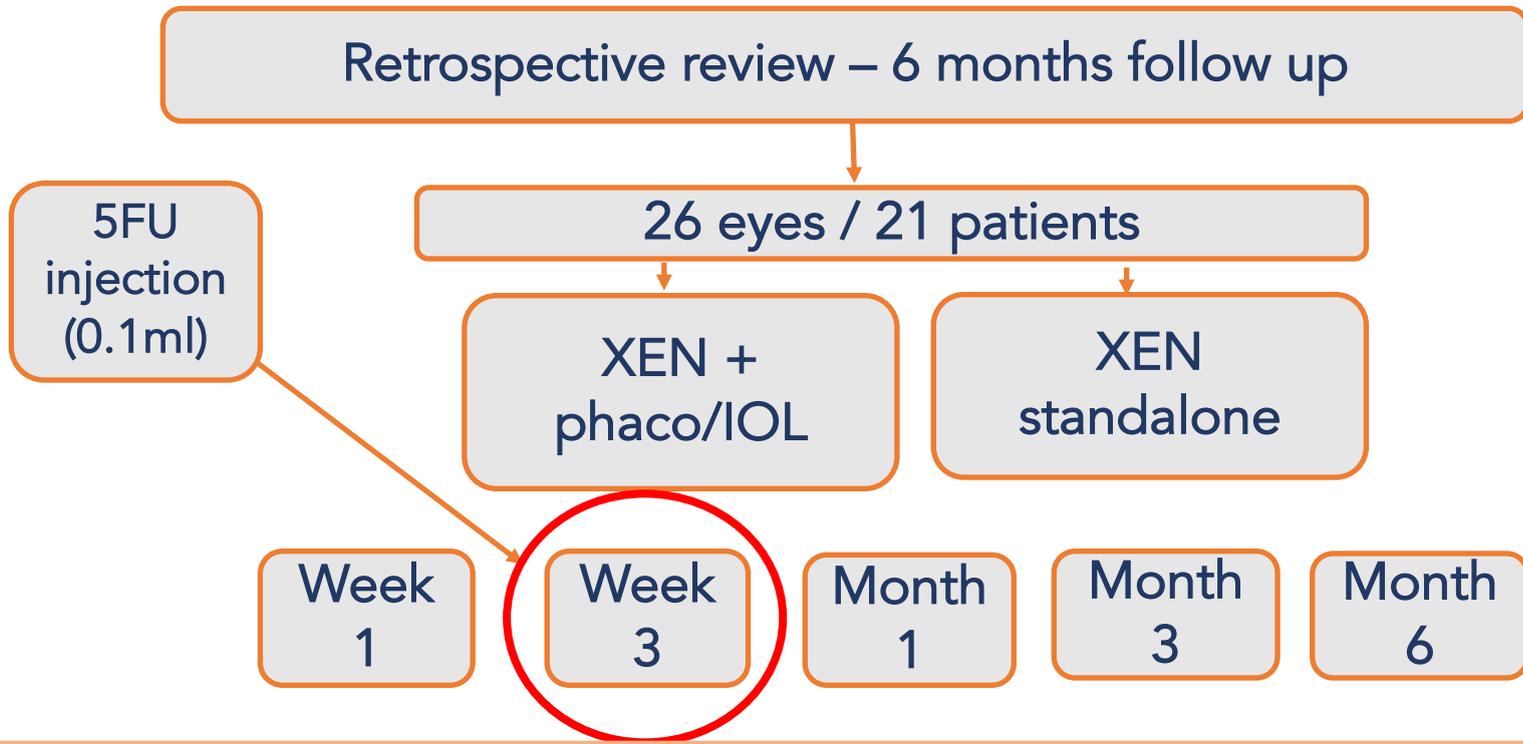


Aim and Methods

Therefore we decided to be proactive and give an injection of 0.1 5FU (25mg/ml) to all postoperative XEN stent at 3 weeks and assess/describe the findings. We collected data on percentage of needling, IOP changes, need of antiglaucoma drops, visual acuity, side effects, complications after 6 months



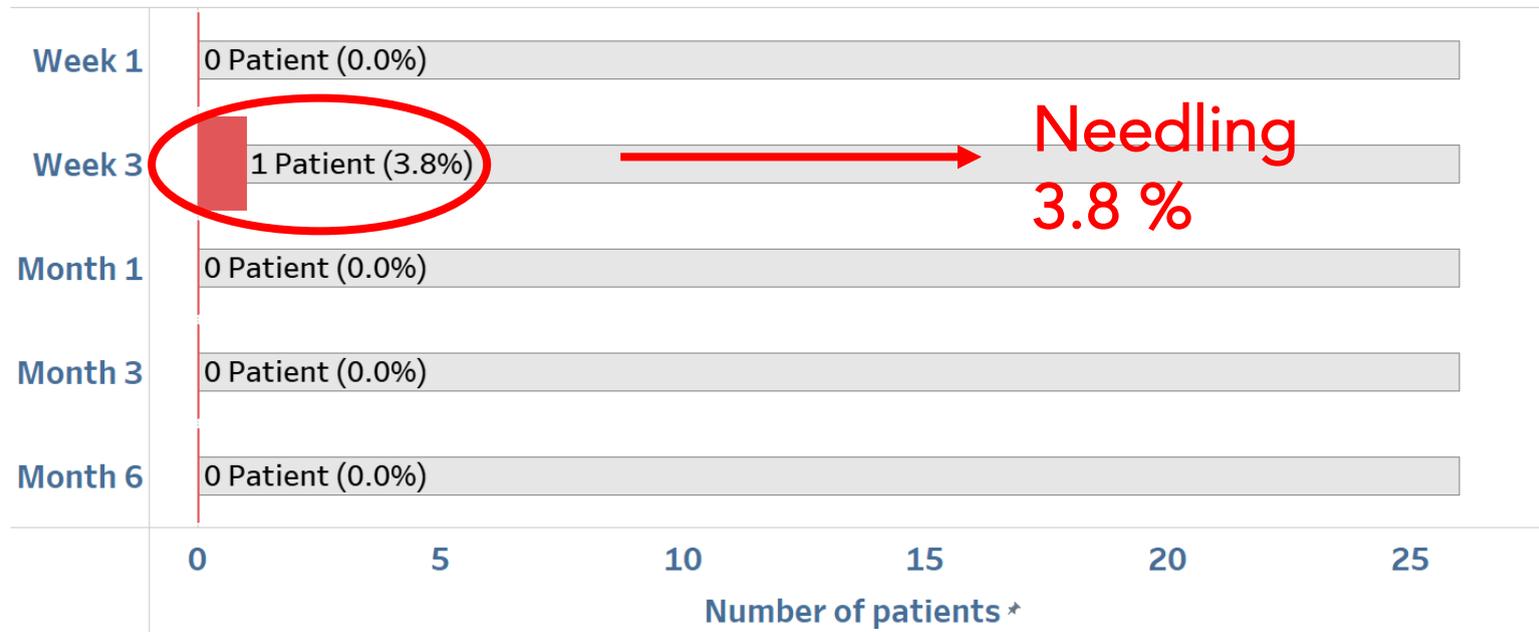
METHODS



Methods

After 6 months of intervention we did a retrospective review of 21 clinical notes (26 eyes) of consecutive patients at Royal Surrey County Hospital. All of the patients had XEN stent implant + phaco/IOL or XEN stent implant standalone. 100% of patients had injection of 5FU at the 3rd week postoperatory.

RESULTS

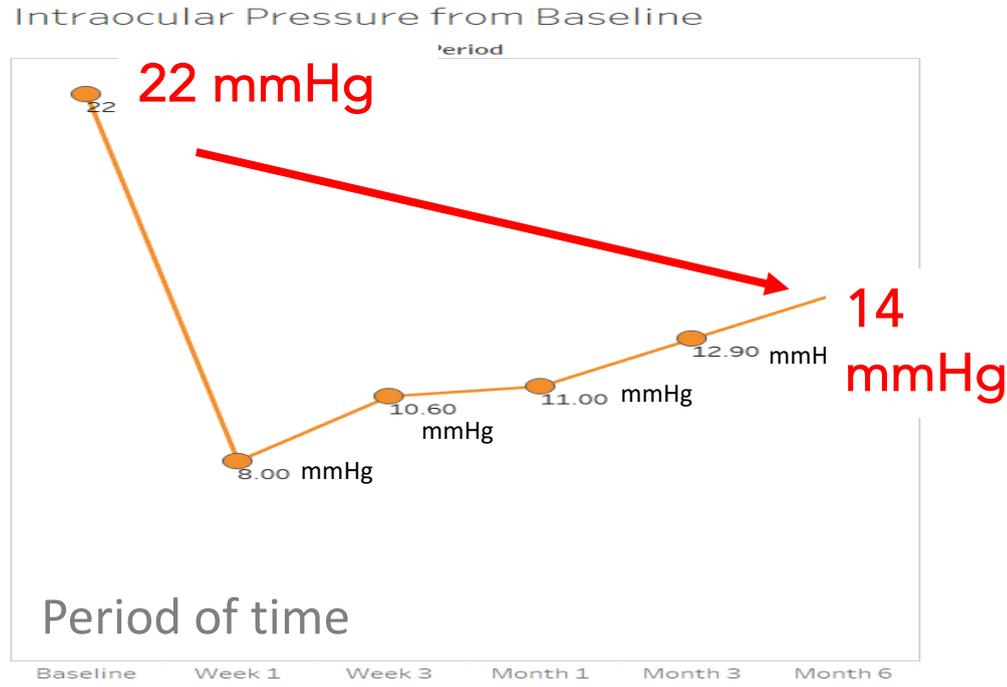


Results

Needling was performed on just 1 of our patients and this was at the 3rd week post-operative XEN stent implantation. This 1 patient constitutes 3.8% of the needling percentage in our group of patients. Just one patient had corneal oedema after 5FU injection – this resolved in 1 week without further complication.

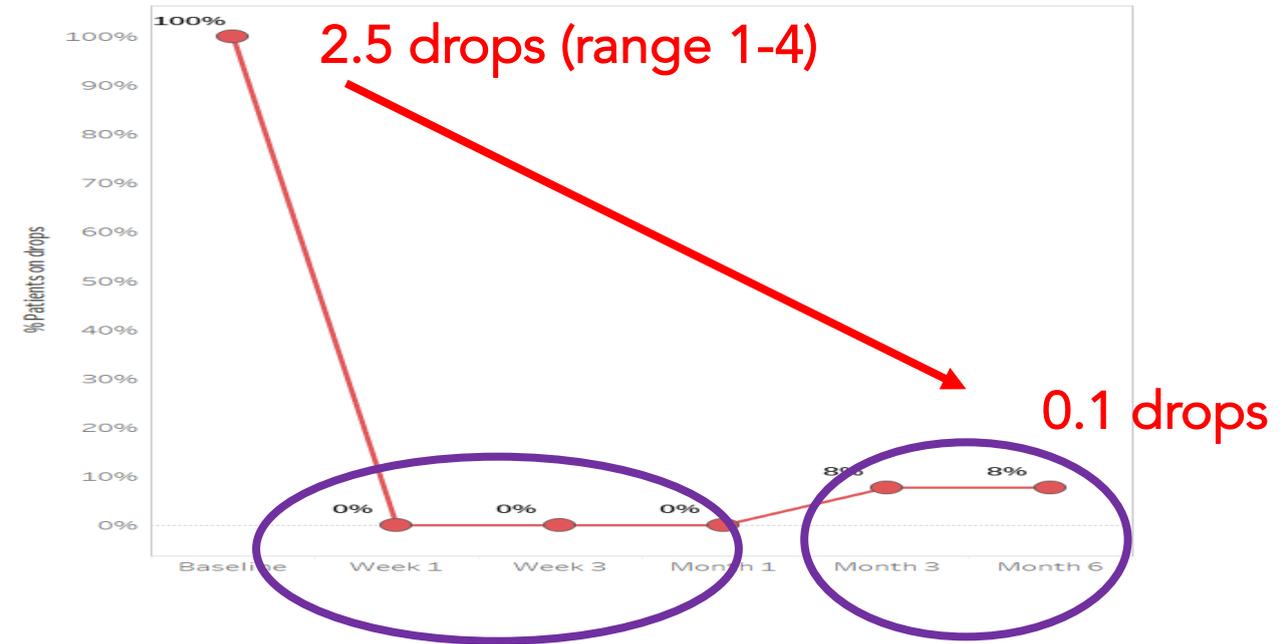
RESULTS IOP

Mean IOP reduced from 22 to 14 mm/Hg. There was a mean reduction of 8 mm/Hg at the end of follow up equivalent to 34% reduction in IOP from baseline.



RESULTS DROPS

Mean number of glaucoma drops reduced from 2.5 to 0.1 at 6 months. At month 3 and 6, 8% of patients were using one drop. At end of follow up 92% patients were of drops



Conclusion:

- We found that routine 5FU (0.1 ml injection) at 3rd week post XEN Gel stent surgery seems to be safe and makes the post-operative course more predictable.
- The percentage of needling in our study group of 3.8% showed a reduction when compared to previous research papers and to our previous needling rate of 20% (our own percentage of needling before we introduced the routine 5FU at 3 weeks post XEN implantation).
- IOP was reduced and glaucoma medication was lower or stopped due to improved function.