

Glaucoma

**NOVEL USE OF A PRESERFLO MICROSHUNT FOR FLOW RESTRICTION
OF A BAERVELDT DRAINAGE DEVICE TO MANAGE EARLY POST-
OPERATIVE HYPOTONY IN A CASE OF PAEDIATRIC UVEITIC
GLAUCOMA**

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PURPOSE

To report the outcome of a novel surgical technique, using a Preserflo Microshunt to modulate the flow of an overdraining Baerveldt implant.

METHODS

We present the case of an 8-year-old female with ANA+ uveitic glaucoma. She underwent insertion of a Baerveldt-250 implant with an intraluminal 3-0 supramid, ligated with 6-0 vicryl. Six-weeks postoperatively, she had a pressure of 3mmHg and reduced visual acuity (6/60) secondary to hypotony maculopathy from tube overdrainage. Initial surgical management involved anterior chamber reformation and insertion of an additional 3-0 supramid segment into the Baerveldt tube lumen. However, this failed to improve the pressure. Subsequently, she underwent insertion of a Preserflo Microshunt into the Baerveldt tube lumen to modulate flow, which successfully treated her hypotony maculopathy.

RESULTS

Surgical technique involved externalisation of the distal end of the Baerveldt tube through a vertical corneal incision. The lumen was widened with a lacrimal probe, and a trimmed Preserflo microshunt was inserted into the distal lumen of the Baerveldt tube. By week 1 postoperatively, hypotony maculopathy had resolved and vision improved to baseline level (6/7.5) and has remained stable to current follow up of 6 weeks. Intraoperative still photographs and pre and post operative OCT scans of the macula are presented.

CONCLUSION

A Preserflo microshunt was successfully used as an intraluminal flow restrictor for a Baerveldt implant to treat visually significant hypotony, after a conventional approach had failed. In this clinically challenging entity of paediatric uveitic glaucoma, this technique could be a safe alternative to permanent tube ligation.