

Authors' reply

Dear Editor,

We thank the authors of the letter for their interest in our article.^[1] We also thank them for highlighting important issues to take the discussion at a higher level.

The outer diameter of the drainage tube of the Ahmed glaucoma valve (AGV) is 0.63mm.^[2] Therefore, the width of the patch graft on either side of the tube is about 2mm. We could achieve good adhesion of the scleral patch graft by gently stroking it over the underlying tube and host sclera with a muscle hook after applying the components of the fibrin sealant between the surfaces. One may use a partial thickness scleral graft if the thickness of the latter is thought to be more or use a wider graft if so required.

Tube cornea touch and conjunctival erosion are related to the placement of the patch graft.^[3] Posterior retraction of the scleral patch graft did occur in one eye. The complication is discussed in our article.^[1]

As the fibrin sealant is made from human blood, it may carry a risk of transmitting infectious agents, e.g., viruses, despite viral inactivation techniques and theoretically, the Creutzfeldt-Jakob disease (CJD) agent. While no ocular infection has been attributed to the use of fibrin sealant, transmission of systemic parvovirus B19 infection by fibrin sealant has been reported.^[4,5] None of our patients had infection related to the use of the fibrin sealant.

Conjunctival closure by fibrin sealant requires mobile conjunctiva to limit post-operative retraction, which can overcome the tensile strength of the fibrin sealant,^[6] especially with the movement of eyelids. Most of our patients had undergone at least one conjunctival manipulating surgery with resultant significant conjunctival fibrosis. Therefore, we did not use fibrin sealant to close the conjunctival wound during AGV implantation.

The implant drainage tube or the base plate may erode into the globe through the underlying thinned host sclera in staphylomatous eyes. We do staphyloma repair, when indicated prior to implantation of AGV in intractable glaucoma.

The fibrin sealant can be prepared side by side by an assistant as the surgery is being performed. The globe is hypotonous when the anchoring sutures to the scleral patch graft are taken and a safe suturing may be time consuming. We therefore, felt that the fibrin sealant-assisted placement of the scleral patch graft may reduce the overall surgical time. We do agree on the issue of increase in the cost of AGV implantation with the use of fibrin sealant. Nevertheless, we have suggested measures to reduce the per-patient-price of the fibrin sealant in the article.^[1]

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References

1. Choudhari NS, Neog A, Sharma A, Iyer GK, Srinivasan B. Our experience of fibrin-sealant-assisted implantation of Ahmed glaucoma valve. *Indian J Ophthalmol* 2013;61:23-7.
2. Ahmed glaucoma valve® [package insert]. Rancho, CA: New World Medical, Inc; 2013.
3. Freedman J. Scleral patch grafts with Molteno setons. *Ophthalmic Surg* 1987;18:532-4.
4. Kawamura M, Sawafuji M, Watanabe M, Horinouchi H, Kobayashi K. Frequency of transmission of human parvovirus B19 infection by fibrin sealant used during thoracic surgery. *Ann Thorac Surg* 2002;73:1098-100.
5. Hino M, Ishiko O, Honda KI, Yamane T, Ohta K, Takubo T, *et al.* Transmission of symptomatic parvovirus B19 infection by fibrin sealant used during surgery. *Br J Haematol* 2000;108:194-5.
6. Kahook MY, Noecker RJ. Fibrin glue-assisted glaucoma drainage device surgery. *Br J Ophthalmol* 2006;90:1486-9.

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