Our experience of fibrin sealant-assisted implantation of Ahmed

glaucoma valve.

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Abstract:

AIM: To report our experience with the fibrin sealant as a suture substitute for securing the human

scleral patch graft during implantation of Ahmed glaucoma valve (AGV).

MATERIALS AND METHODS: A retrospective, non-comparative study of 12 eyes of 12 patients

who underwent an AGV implantation with fibrin sealant for part of the procedure during June 2009 to

September 2010.

RESULTS: The mean patient age was 21.5 +/- 20.6 years. Male: Female ratio was 2 : 1. Seven

(58.3%) patients were monocular. The indications for AGV were varied. The mean number of

intra-ocular surgeries prior to an implantation of AGV was 1.8. The mean follow-up duration was

24.5 +/- 17.9 weeks. There was a statistically significant reduction in the mean IOP and in the mean

number of anti-glaucoma medications at the final visit compared to the pre-operative values (P <

0.01, paired t test). Conjunctival retraction was seen in 1 (8.3%) case. The scleral patch graft was

retracted posteriorly in another (8.3%) case. There was no case of AGV tube exposure, tube-cornea

touch, or conjunctival erosion. Vision threatening complication viz. late post-operative

rhegmatogenous retinal detachment, unlikely to be related to the use of the fibrin sealant, occurred

in 2 (16.6%) eyes.

CONCLUSION: The fibrin sealant offers the advantages of safety and convenience to the placement

of a scleral patch graft during an AGV implantation.	