

**Greater Rate of Corneal Transplantation with Baerveldt Tube Shunts and Higher Rate of Tube-Cornea Touch in Resident Performed Tube Surgeries**

*Reza Razeghinejad, MD; Melih Ustaoglu, MD; Allen Y. Ganjei; Sapna Sinha, MD; Hugh Huynh; Sharmenie Esin; Zoe McWatters; Marlene R. Moster, MD; Jonathan S. Myers, MD, ABO; L. Jay Katz, MD; Elizabeth A. Dale, MD; Daniel Lee, MD, ABO; Michael J Pro, MD; Scott J Fudemberg, MD, ABO; Anand Mantravadi, MD, FACS*

**Purpose**

To evaluate the effect of shunt type (Baerveldt versus Ahmed) and surgeon factor (resident versus attending) on the frequency of tube-cornea touch and corneal decompensation in patients who undergo tube surgery. Previous studies did not show any difference for the type of the shunt or surgeon factor for corneal complications.

**Methods**

This retrospective comparative study was comprised of two sections. To evaluate the effect of the type of shunt, 137 eyes of 122 patients (Ahmed 67, Baerveldt 70) were included. To assess the effect of surgeon factor, 192 eyes of 192 patients (residents 106, attendings 86) were included.

**Results**

In the shunt type data set, all patients had uveitic glaucoma, and the mean follow-up was 29.6+/-3.6 months for Ahmed and 33.1+/-3.8 months for Baerveldt. A greater IOP reduction was observed with Baerveldt shunts. 6 patients in the Baerveldt group required corneal transplant, while none in the Ahmed group did ( $p=0.01$ ). In the surgeon factor data set, the mean follow up was 8.8+/-3.6 and 8.5+/-3.7 months in the resident and attending groups, respectively. In both groups, the IOP decreased significantly. More complications were observed in the resident groups, only the frequency of hyphema (21 versus 2,  $p<0.0001$ ) and tube-cornea touch (9 versus 1,  $p=0.02$ ) were statistically greater.

**Conclusion**

Baerveldt shunts were associated with greater number of tube-cornea touch and corneal transplantation in uveitic glaucoma. A greater number of tube-cornea touch complications were observed in tube shunt surgeries performed by residents compared to those performed by attendings.