



Figure 13-11. SFT with PDEK in a failed penetrating keratoplasty in a patient with one eye. (A) Failed graft of penetrating keratoplasty. (B) Postoperative image following SFT with PDEK. (C) Preoperative anterior segment OCT image. Note the closed angle. (D) Postoperative anterior segment OCT image demonstrating pupil reconstruction with decreased thickness of cornea due to resolution of edema. Note the open angle due to the SFT.

SINGLE-PASS FOUR-THROW PUPILLOPLASTY FOR PRE-DESCMET'S ENDOTHELIAL KERATOPLASTY

The endothelial keratoplasty (EK) procedure involves the supplantation of the endothelial cell layer along with the Descemet's membrane that may or may not be supported with the layer of stroma in the donor graft. An important consideration during the procedure of EK is to prevent and minimize the loss of endothelial cells during the process of donor tissue preparation and also while inserting and repositioning the graft in the anterior chamber. The pupilloplasty procedure is often performed so as to prevent the escape of air into the vitreous cavity, for maintaining the effective air tamponade in the anterior chamber, and also to prevent the posterior dislocation of graft.

SFT has been successfully employed in cases that underwent pre-Descemet's endothelial keratoplasty (PDEK; Figure 13-11). The suture ends when trimmed are essentially parallel to the surface of the iris and do not protrude into the anterior chamber. Hence, the chances of the knot rubbing onto the endothelial cells of the donor graft are negligible.

SUMMARY

Our technique provides a self-locking mechanism that prevents slippage of the suture ends through the loops. Redoing of the second pass to ensure knot placement is not essential.