

TABLE 4 COMPARISON OF SHORT-TERM RESULTS FOR DIFFERENT SURGICAL TECHNIQUES FOR CORNEAL EDEMA (FUCHS AND PBK)

	PK	DLEK	DSAEK	DMEK
Dislocation rate	0.0%	6.6% ^{71,72}	14.5% ⁷⁰	5.0–62.0%* ⁷³⁻⁷⁶
Wound dehiscence	1.3–5.8% ⁷⁷⁻⁷⁹			
Donor failure within 60 days	0.3% ⁸⁰	3.3% ^{71,72}	0–29.0%; mean 5.0% ⁷⁰	2.2– 8.0%, ^{81,82}
Rejection rate at:				
1 yr	17.0% ⁸³	3.4% ^{71,72}	6.0–9.0% ⁸³	0.7–3.0% ^{81,83}
2 yrs	9.7–13.0% ^{84,85}	5.5% ^{71,72}	12.0–14.0% ^{68,86}	
5 yrs	22.2% ⁸⁰		22.0%	
Graft failure rate at 5 yrs	5.0% for Fuchs/ 27.0% for PBK ⁸⁷	27.5% ^{71,72}	5.0% for Fuchs/ 24.0% for PBK ⁸⁷	NA
BSCVA:				
% 20/40 or better at 1 yr	65.0–84.0% with selective suture removal ⁸⁸	40.0–44.1% ^{71,72}	38.0–90.0% ⁷⁰	94.0% at 6 mos ⁷⁴ 97.0% 20/30 or better at 1 yr ⁷⁶
% 20/20 or better				39.0–47.0% ^{74,76}
Time to BCVA	6–12 mos with selective suture removal ⁸⁹	NA	NA	2/3 stable by 3 mos ⁷⁴
Mean keratometric cylinder:				
sutures out	4.40±2.80 D	1.50±1.20 D ^{71,72}		
at 2 yrs	3.70±3.20 D ⁹⁰	0.40–0.60 D induced; mean 0.10 D ^{71,72,90}	0.40–0.60 D induced; mean 0.10 D ⁹⁰	+0.40 D hyperopic shift, ⁹⁰ no change ⁸¹
with sutures in at 1 yr	2.50 D ⁸⁸			
Mean spherical equivalent change	2.80±2.10 D ⁷¹	0.90±0.70 D ^{71,72}	+1.10 D induced hyperopia ^{70,83}	+0.24 to +0.32 D ^{76,91}
Endothelial cell loss:				
1 yr	9.0–19.0% Fuchs [†] 34.0% Fuchs/PBK ^{80,92}	43.0–57.9% ^{71,72}	37.0% ⁸⁷	32.0±20.0%, 34.0% ^{74,81} 36.0% ^{76,93}
2 yrs	27.0–42.0% Fuchs, 54.0% Fuchs/PBK ^{80,92}	57.0% ^{71,72}	44.0% ⁸⁷	
5 yrs	69.0–75.0% Fuchs, 61.0% Fuchs/PBK ^{80,92}	62.0% at 4 yrs ^{71,72}	53.0% ⁸⁷	

BSCVA = best spectacle-corrected visual acuity; BCVA = best-corrected visual acuity; D = diopter; DLEK = deep lamellar endothelial keratoplasty; DMEK = Descemet's membrane endothelial keratoplasty; DSAEK = Descemet's stripping automated endothelial keratoplasty; NA = data not available; PBK = pseudophakic bullous keratopathy

* Only includes dislocations that influenced the result; edge dislocation or tag not counted. If all dislocations are counted = 8.0–24.0%.

† Range – two donor age groups.