Bibliographie

[1] Maurice DM. Cellular membrane activity in the corneal endothelium of the intact eye. Experientia 1968;24(11):1094–5.
[2] Bourne WM, Kaufman HE. Specular microscopy of human corneal endothelium in vivo. Am J Ophthalmol 1976;81(3):319–23.
[3] Bourne WM, Hodge DO, Nelson LR. Corneal endothelium five years after transplantation. Am J Ophthlamol 1994;118:185–96.
[4] Gorovoy MS. Descemet-stripping automated endothelial keratoplasty. Cornea 2006;25(8):886–9.
[5] Melles GR, Ong TS, Ververs B, van der Wees J. Descemet membrane endothelial keratoplasty (DMEK). Cornea 2006;25(8): 987–90.
[6] Lass JH, Reinhart WJ, Bruner WE, et al. Comparison of corneal storage in K-sol and chondroitin sulfate corneal storage medium in human corneal transplantation. Ophthalmology 1989;96:688–97.
[7] Lass JH, Reinhart WJ, Skelnik DL, et al. An in vitro and clinical comparison of corneal storage with chondroitin sulfate corneal storage medium with and without dextran. Ophthalmology 1990;97:96–103.
[8] Lass JH, Bourne WM, Musch DC, et al. A randomized, prospective, double-masked clinical trial of Optisol vs DexSol corneal storage media. Arch Ophthalmol 1992;110(10):1404–8.
[9] Lindstrom RL, Kaufman HE, Skelnik DL, et al. Optisol corneal storage medium. Am J Ophthalmol 1992;114(3):345–56.
[10] McCarey BE, Meyer RF, Kaufman HE. Improved corneal storage for penetrating keratoplasties in humans. Ann Ophthalmol 1976;8(12):1488–92. 1495.
[11] Price MO, Knight ORJ, Benetz BA, et al. Randomized, prospective, single-masked clinical trial of endothelial keratoplasty performance with 2 donor cornea 4°C storage solutions and associated chambers. Cornea 2015;34:253–6.
[12] Kanavi MR, Javadi MA, Chamani T, et al. Comparing quantitative and qualitative indices of the donated corneas maintained in Optisol-GS with those kept in Eusol-C. Cell Tissue Bank 2015;16(2):243–7.
[13] Yuksel B, Uzunel UD, Kusbeci T. Endothelial cell viability of donor corneas preserved in Eusol-C corneal storage medium. Exp Clin Transplant 2016;14(4):441–4.
[14] Pels L. Organ culture: the method of choice for preservation of human donor corneas. Brit J Ophthalmol 1997;81(7):523–5.
[15] Pels E, Beele H, Claerhout I. Eye bank issues: II. Preservation techniques: warm versus cold storage. Int Ophthalmol 2008;28(3):155–63.
[16] Pels E, Rijneveld WJ. Organ culture preservation for corneal tissue. In: Bredehorn-Meyr T, Duncker GIW, Armitage WJ, editors. Eye Banking. Basel: Karger; 2009. p. 31–46.
[17] Eye Bank Association of America. Medical Standards, https://restoresight.org/wp-content/uploads/2017/12/Med-Standards-November-9-2017.pdf; 2017.
[18] Pham C, Hellier E, Vo M, et al. Donor endothelial image quality in Optisol GS and Life 4°C. Int J Eye Banking 2013;1(2):1–8.
[19] Tran KD, Clover J, Ansin A, et al. Rapid warming of donor corneas is safe and improves specular image quality. Cornea 2017;36(5):581–7.
[20] Lass JH, Gal RL, Ruedy KJ, et al. An evaluation of image quality and accuracy of eye bank measurement of donor cornea endothelial cell density in the Specular Microscopy Ancillary Study. Ophthalmology 2005;112(3):431–40.
[21] Benetz BA, Stoeger CG, Patel SV, et al. Comparison of donor cornea endothelial cell density determined by eye banks and by a central reading center in the Cornea Preservation Time Study. Cornea 2019;38:426–32.
[22] Singh G, Bohnke M, von-Domarus D, et al. Vital staining of corneal endothelium. Cornea 1985;4(2):80–91.
[23] Stocker FW, King EH, Lucas DO, Georgiade NA. Clinical test for evaluating donor corneas. Arch Ophthalmol 1970;84(1):2–7.
[24] Obata H, Ishida K, Murao M, et al. Corneal endothelial cell damage in penetrating keratoplasty. Jap J Ophthalmol 1991;35(4):411–6.
[25] Bourne WM. Cellular changes in transplanted human corneas. Cornea 2001;20(6):560–9.
[26] Patel SV, Hodge DO, Bourne WM. Corneal endothelium and postoperative outcomes 15 years after penetrating keratoplasty. Am J Ophthalmol 2005;139(2):311–9.
[27] Zacks CM, Abbott RL, Fine M. Long-term changes in corneal endothelium after keratoplasty. A follow-up study. Cornea 1990;9:92–7.
[28] Ing JJ, Ing HH, Nelson LR, et al. Ten-year postoperative results of penetrating keratoplasty. Ophthalmology 1998;105(10):1855–65.
[29] Patel SV, Diehl NN, Hodge DO, Bourne WM. Donor risk factors for graft failure in a 20-year study of penetrating keratoplasty. Arch Ophthalmol 2010;128(4):418–25.
[30] Lass JH, Gal RL, Dontchev M, et al. Donor age and corneal endothelial cell loss 5 years after successful corneal transplantation. Specular Microscopy Ancillary Study results. Ophthalmology 2008;115(4):627–32.
[31] Lass JH, Benetz BA, Gal RL, et al. Donor age and factors related to endothelial cell loss 10 years after penetrating keratoplasty: Specular Microscopy Ancillary Study. Ophthalmology 2013;120(12):2428–35.
[32] Riddlesworth TD, Kollman C, Lass JH, et al. A mathematical model to predict endothelial cell density following penetrating keratoplasty with selective dropout from graft failure. IOVS 2014;55(12):8409–15.
[33] Laing RA, Sandstrom M, Berrospi AR, Leibowitz HM. Morphological changes in corneal endothelial cells after penetrating keratoplasty. Am J Ophthalmol 1976;82(3):459–64.
[34] Lass JH, Sugar A, Benetz BA, et al. Endothelial cell density to predict endothelial graft failure after penetrating keratoplasty. Arch Ophthalmol 2010;128:63–9.
[35] Sugar A, Gal RL, Kollman C, et al. Factors associated with corneal graft survival in the cornea donor study. JAMA Ophthalmol 2015;133(3):246–54.
[36] Bourne WM, Kaufman HE. The endothelium of clear corneal transplants. Arch Ophthalmol 1976;94:1730–2.
[37] Lass JH, Benetz BA, Patel SV, et al. Donor, recipient, and operative factors associated with endothelial cell loss in the Cornea Preservation Time Study. JAMA Ophthalmol 2019;137:185–93.
[38] Lass JH, Benetz BA, Verdier DD, et al. Corneal endothelial cell loss 3 years after successful Descemet stripping automated endothelial keratoplasty in the Cornea Preservation Time Study: A randomized clinical trial. JAMA Ophthalmol 2017;135(12):1394–400.
[39] Patel SV, Lass JH, Benetz BA, et al. Postoperative endothelial cell density is associated with late endothelial graft failure after Descemet stripping automated endothelial keratoplasty. Ophthalmology 2019;126(8):1076–83.
[40] Bell KD, Campbell RJ, Bourne WM. Pathology of late endothelial failure: late endothelial failure of penetrating keratoplasty: study with light and electron microscopy. Cornea 2000;19:40–6.
[41] Langenbucher A, Seitz B, Nguyen NX, Naumann GO. Corneal endothelial cell loss after nonmechanical penetrating keratoplasty depends on diagnosis: a regression analysis. Graefe's. Arch Clin and Exp Ophthalmol 2002;240:387–92.
[42] Ohguro N, Matsuda M, Shimomura Y, et al. Effects of penetrating keratoplasty rejection on the endothelium of the donor cornea and the recipient peripheral cornea. Am J Ophthalmol 2000;129:468–71.
[43] Regis-Pacheco LF, Binder PS. What happens to the corneal transplant endothelium after penetrating keratoplasty ? Cornea 2014;33(6):587–96.
[44] Bourne WM. Functional measurements on the enlarged endothelial cells of corneal transplants. Tr Am Ophthalmol Soc 1995;93:65–79.
[45] Lass JH, Beck RW, Benetz BA, et al. Baseline factors related to endothelial cell loss following penetrating keratoplasty. Arch Ophthalmol 2011;129(9):1149–54.
[46] Benetz BA, Lass JH, Gal RL, et al. Endothelial morphometric measures to predict endothelial graft failure after penetrating keratoplasty. JAMA Ophthalmol 2013;131(5):601–8.
[47] Borderie VM, Boelle PY, Touzeau O, et al. Predicted long-term outcome of corneal transplantation. Ophthalmology 2009;116(12):2354–60.
[48] Frueh BE, Bohnke M. Prospective, randomized clinical evaluation of Optisol vs organ culture corneal storage media. Arch Ophthalmol 2000;118(6):757–60.
[49] Hagenah M, Carstens D, Bohnke M, Winter R. Development of endothelium cell density using fresh and organ cultured tissue. 5 years after penetrating keratoplasty. Ophthalmologe 1997;94(2):90–3.

[50] Eye Bank Association of America. 2018 Annual Statistical Report 2019.
[51] Price MO, Gorovoy M, Benetz BA, et al. Descemet's stripping automated endothelial keratoplasty outcomes compared with penetrating keratoplasty from the Cornea Donor Study. Ophthalmology 2010;117(3):438–44.
[52] Price MO, Gorovoy M, Price Jr FW, et al. Descemet's stripping automated endothelial keratoplasty: three-year graft and endothelial cell survival compared with penetrating keratoplasty. Ophthalmology 2013;120(2):246–51.
[53] Price MO, Fairchild KM, Price DA, Price Jr FW. Descemet's stripping endothelial keratoplasty five-year graft survival and endothelial cell loss. Ophthalmology 2011;118(4):725–9.
[54] Price MO, Calhoun P, Kollman C, et al. Descemet stripping endothelial keratoplasty: Ten-year endothelial cell loss compared with penetrating keratoplasty. Ophthalmology 2016;123(7):1421–7.
[55] Patel SV. Graft survival and endothelial outcomes in the new era of endothelial keratoplasty. Exp Eye Res 2012;95(1):40–7.
[56] Price MO, Bidros M, Gorovoy M, et al. Effect of incision width on graft survival and endothelial cell loss after DSAEK. Cornea 2010;29(5):523–7.
[57] Terry MA, Aldave AJ, Szczotka LB, et al. Donor, recipient, and operative factors asssociated with graft success in the Cornea Preservation Time Study. Ophthalmology 2018;125:1700–9.
[58] Ragunathan S, Ivarsen A, Nielsen K, Hjortdal J. Comparison of organ cultured precut corneas versus surgeon-cut corneas for Descemet's stripping automated endothelial keratoplasty. Cell Tissue Bank 2014;15(4):573–8.
[59] Dickman MM, Kruit PJ, Remeijer L, et al. A randomized multicenter clinical trial of ultrathin Descemet stripping automated endothelial keratoplasty (DSAEK) versus DSAEK. Ophthalmology 2016;123(11):2276–84.
[60] Madi S, Leon P, Nahum Y, et al. Five-year outcomes of ultrathin Descemet stripping automated endothelial keratoplasty. Cornea 2019;38(9):1192–7.
[61] Rodriguez-Calvo-de-Mora M, Quilendrino R, Ham L, et al. Clinical outcome of 500 consecutive cases undergoing Descemet's membrane endothelial keratoplasty. Ophthalmology 2015;122(3):464–70.
[62] Feng MT, Price MO, Miller JM, Price Jr FW. Air reinjection and endothelial cell density in Descemet membrane endothelial keratoplasty: five-year follow-up. J Cataract Refract Surg 2014;40(7):1116–21.
[63] Baydoun L, Tong CM, Tse WW, et al. Endothelial cell density after Descemet membrane endothelial keratoplasty: 1 to 5-year follow-up. Am J Ophthalmol 2012;154(4):762–3.
[64] Quilendrino R, Hohn H, Tse WH, et al. Do we overestimate the endothelial cell "loss" after Descemet membrane endothelial keratoplasty ? Curr Eye Res 2013;38(2):260–5.
[65] Schaub F, Enders P, Snijders K, et al. One-year outcome after Descemet membrane endothelial keratoplasty (DMEK) comparing sulfur hexafluoride (SF6) 20 % versus 100 % air for anterior chamber tamponade. Br J Ophthalmol 2017;101(7):902–8.
[66] Schlogl A, Tourtas T, Kruse FE, Weller JM. Long-term clinical outcome after Descemet membrane endothelial keratoplasty. Am J Ophthalmol 2016;169:218–26.
[67] Laaser K, Bachmann BO, Horn FK, et al. Donor tissue culture conditions and outcome after Descemet membrane endothelial keratoplasty. Am J Ophthalmol 2011;151(6):1007–18.
[68] Peraza-Nieves J, Baydoun L, Dapena I, et al. Two-year clinical outcome of 500 consecutive cases undergoing Descemet membrane endothelial keratoplasty. Cornea 2017;36(6):655–60.
[69] Birbal RS, Ni Dhubhghaill S, Bourgonje VJA, et al. Five-year graft survival and clinical outcomes of 500 consecutive cases after Descemet membrane endothelial keratoplasty. Cornea 2020;39(3):290–7.
[70] Miron A, Bruinsma M, Ham L, et al. In vivo endothelial cell density decline in the early postoperative phase after Descemet membrane endothelial keratoplasty. Cornea 2018;37(6):673–7.
[71] Dirisamer M, Ham L, Dapena I, et al. Descemet membrane endothelial transfer: "free-floating" donor Descemet implantation as a potential alternative to "keratoplasty". Cornea 2012;31(2):194–7.
[72] Birbal RS, Hsien S, Zygoura V, et al. Outcomes of hemi-Descemet membrane endothelial keratoplasty for Fuchs endothelial corneal dystrophy. Cornea 2018;37(7):854–8.
[73] Zygoura V, Baydoun L, Ham L, et al. Quarter-Descemet membrane endothelial keratoplasty (Quarter-DMEK) for Fuchs endothelial corneal dystrophy: 6 months clinical outcome. Br J Ophthalmol 2018;102(10):1425–30.
[74] Culbertson WW, Abbott RL, Forster RK. Endothelial cell loss in penetrating keratoplasty. Ophthalmology 1982;89:600–4.
[75] Price DA, Kelley M, Price Jr FW, Price MO. Five-year graft survival of Descemet membrane endothelial keratoplasty (EK) versus Descemet stripping EK and the effect of donor sex matching. Ophthalmology 2018;125:1508–14.
[76] Edelhauser HF. The resiliency of the corneal endothelium to refractive and intraocular surgery. Cornea 2000;19(3):263–73.
[77] Lass JH, Musch DC, Gordon JF, Laing RA, The Corneal Preservation Study Group. Epidermal growth factor and insulin use in corneal preservation. Ophthalmology 1994;101:352–9.
[78] Kinoshita S, Koizumi N, Ueno M, et al. Injection of cultured cells with a ROCK inhibitor for bullous keratopathy. NEJM 2018;378(11):995–1003.
[79] Garcerant D, Hirnschall N, Toalster N, et al. Descemet's stripping without endothelial keratoplasty. Curr Opinion Ophthalmol 2019;30(4):275–85.
[80] Macsai MS, Shiloach M. Use of topical Rho kinase inhibitors in the treatment of Fuchs dystrophy after Descemet stripping only. Cornea 2019;38(5):529–34.