TITLE: Most frequent indications for keratoplasty at 2 academic centers over a 6-year period

METHODS: A retrospective review was performed for the indications for keratoplasty from 2002-2007 at Washington University in St. Louis (WUSTL) and St. Louis University (SLU). A pathology database search was used to find all pathology reports of keratoplasty specimens. The patients' age, sex, right or left eye, type of keratoplasty, indication for keratoplasty, and ocular comorbidities were recorded. A total of 855 and 110 eyes underwent keratoplasty at WUSTL and SLU, respectively, during this time period. Statistical reports were obtained from the Eye Bank Association of America (EBAA) for the corresponding years 2002-2007. The indications for keratoplasty were reviewed and averaged for these 6 years and compared to the data from our academic centers.

RESULTS: At WUSTL, the most common indication for keratoplasty was graft failure at 31.6%. This was followed by Fuchs corneal dystrophy at 22.1%, pseudophakic and aphakic bullous keratopathy at 17.6%, and keratoconus at 6.9%. At SLU, the most common indications for keratoplasty were PBK/ABK at 34.4% and graft failure at 32.7%. This was followed by Fuchs dystrophy (10%) and keratoconus (6.4%). Averaging the 2002-2007 EBAA data, the most common indication for keratoplasty nation-wide was PBK/ABK at 19.9%. This was followed by keratoconus at 15.9% and then Fuchs dystrophy at 13.3%. Re-grafts accounted for only 13.2% of keratoplasties performed during this time period nation-wide.

CONCLUSIONS: In our review of the indications for keratoplasties at two academic centers in St. Louis, we found re-grafts to account for approximately one third of all keratoplasties, which was more than double the proportion in the national data during this time period. We postulate that these higher percentages for re-grafting represent a referral bias of complex patients to academic centers who ultimately require multiple keratoplasties.

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