Abstract:

Background:
Penetrating keratoplasty is performed in order to improve the vision in irreversible corneal damage. Quality of care in penetrating keratoplasty procedures was assessed by evaluating patient satisfaction, visual functional impairment and the visual acuity of patients pre- and postoperatively.

Methods:
Processes and outcomes were assessed, in patients who underwent penetrating keratoplasty in Hadassah between 12/2005 – 12/2006 with a follow up of one year after the operation, by the following:

1. Questionnaire that assesses the extent to which functional activities of daily living (related to vision) were impaired before undergoing the operation (validated measure VF-14)
2. Questionnaire that assesses the processes during hospitalization. It was given in the first few postoperative days.
3. Questionnaire that assesses the pain and irritation in transplanted eye, the impairment of daily activities related to vision (VF-14) and patients satisfaction by the outcomes after one year.
4. Measurement of best corrected visual acuity before and after the procedure.

Outcomes:
Seventeen patients were included in this study, aged 17-80 years, who underwent penetrating keratoplasty for a variety of indications including, keratoconus, graft failure and corneal scarring.
The majority of patients think the procedure was successful and "very worthwhile". 76% are satisfied of their vision and more than a half think that their life quality improved after the procedure. The majority recommend undergoing the procedure in Hadassah.

Visual functioning and visual acuity improved significantly after transplantation. The mean visual function index (VF-14) score preoperatively was 70%±19% (mean±SD) in a scale between 0 (complete visual functional impairment) to 100% (no visual functional impairment). It improved to 82%±15% postoperatively (Wilcoxon paired sample test, p = 0.001). The mean visual acuity preoperatively was 1.83±0.71 (logMAR). It improved to 0.92±0.83, at one year (Wilcoxon paired sample test, p < 0.001).

The waiting time to operation was "adequate" for 71% of patients, "long" for 12% and "very long" for 17%. 82% of the patients stated the explanation they received (from physicians) was "excellent". 88% stated nursing staff treatment was "excellent".

29% of the patients developed complications, during the first postoperative year, including: acute graft rejection, corneal and sutures infections. One year after the transplantation, about a half didn't have any pain or irritation in the transplanted eye, and a half had pain or irritation rarely.

**Conclusions:**

Penetrating keratoplasty significantly improves the visual functioning and the visual acuity. Quality of Care in Penetrating Keratoplasty Procedures at Hadassah is good. Further efforts should be made to shorten the waiting list.
Bibliography


