

UNDERSTANDING DIFFERENT TYPES OF CORNEAL TRANSPLANTATION

ABSTRACT

Corneal blindness is one of the major causes of reversible blindness, which can be managed with transplantation of a healthy donor cornea. It is the most successful organ transplantation in the human body as cornea is devoid of vasculature, minimizing the risk of graft rejection.

Keratoplasty has come a long way since the initial surgeries wherein the whole cornea was replaced to the present day where only the selective diseased layer can be replaced. These newer procedures maintain structural integrity and avoid catastrophic complications associated with open globe surgery.

Corneal transplantation procedures are broadly classified as full-thickness penetrating keratoplasty and partial lamellar corneal surgeries which include anterior lamellar keratoplasty [superficial anterior lamellar keratoplasty (SALK) and deep anterior lamellar keratoplasty (DALK)] and posterior lamellar keratoplasty [Descemet stripping automated endothelial keratoplasty (DSAEK) and Descemet membrane endothelial keratoplasty (DMEK)].