

Corneal Transplant

What is a corneal transplant?

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The cornea is normally a clear layer of tissue covering the front of the eye, similar to a watch crystal. Its purpose is to refract or bend light rays as they enter the eye, allowing them to focus on the retina. In cases where the cornea has become clouded as a result of disease, swelling, scarring, infection, or chemical burns, a corneal transplant (also called a keratoplasty) is sometimes necessary to restore functional vision. For this procedure, the surgeon carefully removes the damaged central corneal tissue and replaces it with a precisely shaped replica of donor tissue.

What are the chances of a successful surgery?

The success rate of corneal transplant is about 85%. However, factors such as glaucoma, macular degeneration, or optic nerve disease may affect the final visual result even if the transplant is successful.

The procedure usually takes approximately one hour and is performed with local anesthesia on an outpatient basis. Drops are prescribed before and after surgery to prevent infection and rejection of the donor cornea. After the surgery, a plastic shield may be prescribed to be worn at night for one week to prevent rubbing, bumping, or scratching the eye.

During the postoperative period, a doctor monitors the cornea's healing with special computer mapping called corneal topography. This allows the doctor to evaluate the shape of the new cornea and remove sutures as needed to control astigmatism.

What type of vision can you expect after surgery?

In most cases, vision returns very gradually. The healing process may vary greatly from one individual to the next. Some may enjoy improved vision within a few months after surgery, for others, it may take up to a year. In some cases, depending on the type of transplant, the use of a special rigid contact lens is required for optimal vision.

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