

Information

# Surgery of the Cornea





EMP FANG

# Reasons for Corneal Surgery

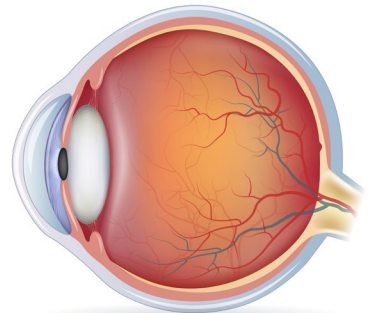
Reasons for corneal surgery include:

- Corneal scars
- Corneal degeneration
- Corneal thinning
- Keratoconus
- Corneal changes after cataract surgery
- Inherited corneal disorders
- Corneal inflammation

The goals of corneal surgery include improving visual acuity, reducing pain or closing extensive corneal defects.

Possible corneal surgeries include:

- Transplantation of the entire thickness of the cornea (penetrating keratoplasty, PKP)
- Transplantation of individual corneal layers
  - DMEK (Descemet Membrane Endothelial Keratoplasty)
  - DSAEK (Descemet's Stripping Automated Endothelial Keratoplasty)
  - DALK (Deep Anterior Lamellar Keratoplasty)
- Amniotic membrane transplant to cover the cornea
- Conjunctival coverage of the cornea
- Intrastromal oil injection



# The Surgery

Please **fast** prior to the operation (no food or drink starting 6 hours before the admission time).

## Anesthesia

Corneal surgery is usually performed under general anesthesia, or in selected cases under local anesthesia. You will discuss this with your surgeon in advance of the surgery. Our anesthesia team will assist you before, during and after the surgery.

## Surgery

Corneal surgery is performed under the microscope with micro-instruments. In case of corneal transplantation, either the whole cornea (PKP) or part of it (DMEK, DSAEK, DALK) is replaced. The donor cornea is either sewn on (PKP, DALK) or pressed on with air/gas (DMEK, DSAEK).

In the case of amnion and conjunctival covers, an appropriate nutrient-rich protective layer is sewn onto the cornea to support healing.

## Hospitalization

Due to the complexity of the procedure and to monitor for possible complications, corneal surgery is usually performed on an inpatient basis (2 nights postoperatively).

## Aftercare

In corneal surgery, the subsequent postoperative care is of particular importance. This is why close follow-up examinations take place in our polyclinic.



### **Thread Removal**

Corneal sutures are usually removed after several months, or left for up to a year. They are removed as part of a consultation appointment.

### **Operation Result**

Healing after corneal surgery sometimes takes a long time. The final result of the operation can only be assessed weeks or months later. Visual acuity can therefore improve even after several months.



## Risks

Every surgery is associated with risks. A detailed assessment of the benefits and risks of the surgical procedure will be conducted prior to the surgery together with the treating team. The final decision for or against surgery is yours. You can withdraw from an operation at any time.

- Pain, foreign body sensation, tearing
- Unpredictable visual prognosis
- Bleeding (including choroidal bleeding)
- Inflammation/infection
- Need for further surgery
- Suture replacement, re-bubbling
- Graft rejection, graft failure
- Fluctuating and increased intraocular pressure
- Temporary swelling of the retina or cornea
- Injury to other structures in the eye
- Development of a cataract, instability or subluxation of the artificial lens
- General anesthetic risks
- Temporary or permanent change in vision and risk of blindness (rare)

**Please discuss any open questions with your healthcare team prior to the procedure.**



# Postoperative Recommendations

## Eye Drops and Ointments

- You will receive a postoperative prescription for eye drops and/or eye ointment (usually antibiotic and anti-inflammatory drugs).
- Make sure you use the therapy regularly as instructed.
- If necessary, you can also apply moisturizing eye drops for foreign body sensation.
- Please bring the prescriptions/medication with you to the follow-up appointments so that they can be adjusted as necessary.



## Eye Protection

- Please wear safety goggles (provided if needed) or your own goggles during the day.
- Please wear the eye shield at night for the first few weeks.

## Postoperative Body or Head Posture

- Pay attention to the prescribed post-operative lying position or head position.

## Follow-up Examinations

- We will give you the dates for the follow-up appointments upon discharge.
- Normally, the follow-up appointments after corneal surgery take place once per week within the first month.
- Further predefined follow-up appointments will be planned after 4 months and one year.
- If you notice any deterioration (loss of vision, new shadows, floaters, pain), a prompt follow-up visit is recommended (within 24 hours).





### **Allowed After Surgery**

- Cleaning of the closed eye with tap water without pressure
- You may shower and wash your hair, but avoid getting water in your eye during the first few days
- Reading, watching TV, light housework
- Lifting of light objects (using only the muscle strength of the arms)
- Going for a stroll or light walk



### **Avoid After Surgery**

- Rubbing and pressing on the eye
- Working in a very dusty or dirty environment (stable, carpentry, garden, etc.)
- Strenuous sport (jogging, cycling, etc.)
- Swimming / public baths
- Driving a car until you get permission from the ophthalmologist

# Normal Symptoms and Warning Signs



## Normal Symptoms

- Transient blurred vision after the operation
- Mild symptoms such as scratching, burning, tearing, foreign body sensation, reddening of the eyes



## Warning Signs

- Increase in pain, redness, tearing
- Severe itching, noticeably red/swollen eyelids
- Significant visual impairment
- Perception of new shadows

If you have any suspicious symptoms, we recommend that you see your ophthalmologist within 24 hours or visit us at the department of ophthalmology (during daytime from Monday to Friday) or in the general emergency department at the Inselspital (from 5 p.m. and on weekends and public holidays).

# Contact Information Inselspital Eye Clinic

Our ophthalmologists at Inselspital are available 24 hours a day.

**Department of Ophthalmology (Monday – Friday, 8 a.m. – 5 p.m.)**

+ 41 31 632 25 01

**University Clinic for Emergency Medicine (24 hours)**

+ 41 31 632 24 02

**General contact Inselspital Bern (24 hours)**

+ 41 31 632 21 11

(ask for the ophthalmologist)

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