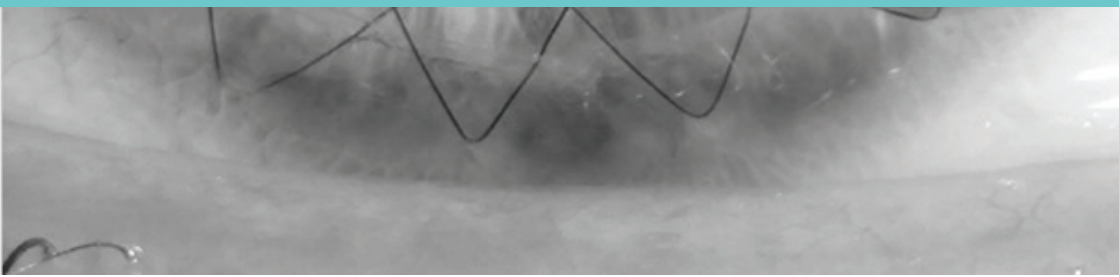




Corneal donation in **Luxembourg**

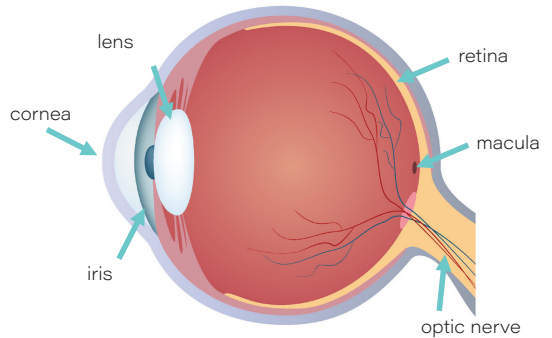
A collaboration between luxembourgish hospitals
and the Department of Ophthalmology at
Saarland University Medical Center



The cornea

The cornea is the outer transparent protective layer of the eye - comparable to a windscreen. It is about half a millimeter thick and extremely well innervated.

If the cornea becomes opacified or severely curved, this can lead to a deterioration in vision or even reversible blindness. Initially, attempts are made to help with conservative means such as eye drops, glasses or contact lenses. However, there are diseases in which only a corneal transplant (keratoplasty) can restore vision.



The transplantation

Corneal transplantation was the very first successful transplant in humans. Today, it is performed more frequently worldwide than all other organ transplants combined and is unbeaten with a success rate of over 90%.

There are different transplantation procedures depending on the individual disease. Either a complete corneal transplantation (penetrating keratoplasty) can be performed, in which all layers of the cornea are transplanted, or only a part (lamella) of the corneal layers is transplanted from the donor (lamellar keratoplasty).

Patients with opacified or severely distorted corneas only have a chance of regaining their sight if more people are prepared to make a major contribution with this small tissue donation after their death. Short- or long-sightedness or advanced age do not affect the quality of the donor cornea. This also applies to previous cataract surgery.



The removal

After the patient's death, the family members are asked for their consent for the corneal removal. A list of contraindications is then checked by the attending physician and the extraction is authorized. The cornea can be removed up to 72 hours post mortem.

A trained nurse removes the donated corneas under sterile conditions. It is very important to know that not the entire eye is removed, but only a corneoscleral disc the size of a contact lens. This disc is then replaced with a plastic disc and the eyelids are tightly closed. The appearance of the deceased is thus completely preserved and the removal is not visible to the relatives. Also, the removal does not delay the funeral.

The harvested corneas are stored in a special liquid, processed for transplantation at the eye bank in Homburg and their quality is checked. Corneas from patients up to the age of 90 or more can also fulfil these characteristics, so there is no age limit for corneal donation.

The cooperation

In **November 2012**, on the initiative of the Luxembourg Ministry of Health, an international agreement was concluded with the Centre Hospitalier du Luxembourg and the department of ophthalmology at Saarland University Medical Center in Homburg/Saar.

The main purpose was to expand the supply of tissue donations in order to meet the increasing demand for corneas. In return, Luxembourg patients with an S2 certificate have access to corneal transplants.

The following collaborations have been initiated:

- **2015: Hôpitaux Robert Schuman (Kirchberg)**
- **2016: Centre Hospitalier Emile Mayrisch (Esch-sur-Alzette)**
- **2022: Centre Hospitalier du Nord (Ettelbruck)**

This means that all 4 major clinics in Luxembourg are active in corneal donation. During this period, a total of 19 Luxembourgish nurses qualified for corneal extraction. From 2012 to 2023, 1026 corneal donations were made in Luxembourg and 390 Luxembourgish patients were successfully transplanted at the eye clinic in Homburg.

In cooperation



UKS
Universitätsklinikum
des Saarlandes

Klinik für Augenheilkunde

Klinik für Augenheilkunde
Universitätsklinikum des Saarlandes UKS
Kirrberger Str. 100, Geb. 22
66424 Homburg/Saar
www.augenklinik-saarland.de



Klaus
Faber
Zentrum

Klaus Faber Zentrum für Hornhauterkrankungen
inkl. LIONS-Hornhautbank Saar-Lor-Lux, Trier/Westpfalz
Kirrberger Str. 100, Geb. 22, 66424 Homburg/Saar
Tel.: +49 68 41 / 16 223 53
Tel.: +49 68 41 / 16 223 37
E-Mail: lions.hornhautbank@uks.eu



Centre Hospitalier
de Luxembourg

Centre Hospitalier du Luxembourg
4, rue Nicolas Ernest Barblé
L-1210 Luxembourg
Tel.: +352 4411 7409
E-Mail: desousa.jorge@chl.lu



Hôpital Kirchberg
9, rue Edward Steichen
L-2540 Luxembourg
Tel.: +352 246 81



Centre Hospitalier Emile Mayrisch
Rue Emile Mayrisch
L-4240 Esch-sur-Alzette
Tel.: +352 57 111
E-Mail: dondecornée@chem.lu



Centre Hospitalier du Nord
120, avenue Salentiny
L-9080 Ettelbruck
Tel.: +352 816 61



omega 90

Omega 90
2 rue de Chiny
L-1334 Luxembourg
Tel.: +352 26 00 371



Lions International District 113 - G.D. de Luxembourg
Sponsor LIONS-Hornhautbank Saar-Lor-Lux, Trier/Westpfalz
40, boulevard Napoléon Ier
L-2210 LUXEMBOURG
Tel.: +352 45 78 79
E-Mail: doncornee@lions.lu