

Slit Lamp Examination

Slit lamp is a magnifying microscope with an adjustable light beam that provides a stereoscopic view of the eye anterior structures, including the eyelids, the sclera, conjunctiva, iris, lens, and the cornea.

Why it is performed

Slit lamp examination is performed to:

- Detect disease of the eye, including cataract, macular degeneration, retinal detachment and retinal vessel occlusion, to name a few.
- Evaluate complications following injury e.g., bleeding or presents of foreign objects in the eye and assess outcomes of ophthalmic treatments.

How to prepare

Patients are advised to arrange transportation to drive them home. Some of them may be advised to wear sunglasses in a brightly lit room or outside after the examination. To prepare for the exam, short-acting eye drops are used to dilate the eyes.

How it is performed

During the examination, the slit lamp is placed in front of the patient's eyes, in line with the ophthalmologist's eyes (as illustrated below). The patient is asked to focus vision in the direction requested by the ophthalmologist and hold the eyes steady.



A narrow beam of bright light from the slit lamp is directed into patient's eye while the Ophthalmologist looks through the microscope to examine the eye structures. The slit lamp examination takes from 5 to 10 minutes.

Results

The structures in front of the eye should appear normal to the examiner. If abnormalities are detected, the results vary significantly depending on a condition and objectives of the examination.

How it feels

The slit lamp examination is completely painless. Some people may notice a brief stinging sensation when the dilating drops are put into their eye or feel a test of medicine in your mouth when the eye drops drain through the tear ducts into the back of the throat. Furthermore, some people may have difficulties focusing their eyes for a few hours. The dilating eye drops typically wear off in about 20-30 minutes.

What the risks are

The slit lamp examination involves no risk. In some patients, however, the dilating eye drops can cause brief episodes of nausea, dryness of the mouth, flushing, and dizziness. In rare cases, severe reactions can occur.