

Ophthalmology

Focal illumination – We use a connecting lens to focus the beam of light from the lighting lamp into the patient's eye. This way, the anterior segment and the lens can be examined.

Examination with an eye mirror – This is a mirror with a small hole in the middle equipped with a holder. The light source is next to the patient. We throw light into the eye with a mirror and observe the pupil through the hole. Under normal circumstances, the pupils glow bright red, the so-called posterior eye reflex.

Ophthalmoscope – This is the examination of the eye with an eye mirror and the observation of the retina and choroid, the so-called fundus. We distinguish direct ophthalmoscopy, when we get a direct image magnified by about 16x, and indirect, when we insert a coupler between the ophthalmoscope and get an inverted image magnified by about 4x.

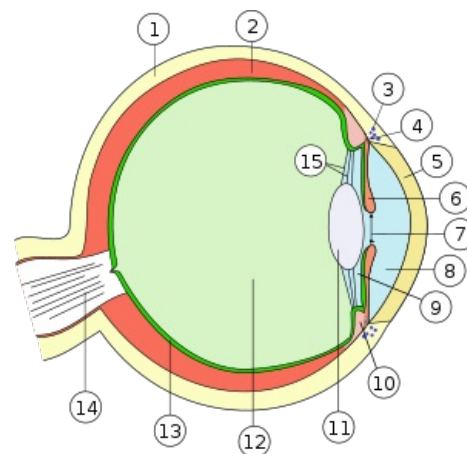
Biomikroskopy – When illuminated with a slit lamp, which has an illuminating and magnifying part, we mainly examine the front segment of the eye, the cornea and the lens.

Skioskopy – A method for examining the refraction of the eye as a whole, where we use an eye mirror and a set of lenses, which we tentatively place in front of the examined eye.

Refractometers – Devices for measuring the total refraction of the eye, they focus the image projected on the background of the eye.

Keratometers – Instruments for measuring the curvature of the cornea by the reflection of test lights on the cornea.

Computed Tomography CT – Provides accurate anatomical imaging of the eye in precise, detailed, computer-processed sections.



Structure of the eye

Links

Related articles

- Eye (biophysics)
- Eye (biophysics)/Disorders of the eye
- Eye (biophysics)/Principle of vision

Source

- KYMPLOVÁ, Jaroslava. *Katalog metod v biofyzice* [online]. [cit. 2012-09-20]. <<https://portal.lf1.cuni.cz/clanek-793-katalog-metod-v-biofyzice>>.