Department of Ophthalmology

Department of Ophthalmology is an integrated medical facility, educational and research centre in the East Bohemia region. The clinic performs a wide range of diagnostic and therapeutic procedures, including all surgical procedures. Specialized consulting rooms cover the issues of eye diseases in children, complications of diabetes, age-related macular degeneration, glaucoma, neuro-ophthalmology, electrophysiology, severe visual impairment. We provide superconsular services across the entire field of ophthalmology.

Main research topics

- · Visual rehabilitation of the visually impaired.
- · Diseases of the cornea and surface of the eye, including dry eye.
- Diseases of the posterior segment of the eye.
- Electrophysiology of Vision.

Scientific research groups

- We cooperate with the Department of Pathological Physiology and Biophysics (prof. Kremláček, dr. Langrová, dr. Szanyi).
- We focus on the electrophysiology of the visual pathway and the possibilities of rehabilitation of the visually impaired.
- We focus on the electrophysiological findings in patients with age-related macular degeneration and on the electrophysiological findings in patients with inherited retinal disorders.

Equipment

For comprehensive ophthalmological examinations and in the course of studies and research, we use all instruments in the clinic, **OCT**, **ultrasound**, **fundus cameras**, **operating microscopes during surgery**, **electrophysiological system**.

Achievements

- Completion of grant NV18-06-00484 and AZV No. 17-29241A, where we fulfilled all planned tasks and publication outputs.
- Launch of grant NV22-06-00039.

Cooperation

- · Cooperation within the above group with The Institute of Psychology of CAS (doc. Šikl, dr. Lukavský).
- · Cooperation with Tyfloservis in complex care for the visually impaired and blind.
- Cooperation with the III. internal gerontometabolic: Prof. V. Blaha and IV. internal hematological clinic of the Medical fakulty: Prof. M. Bláha, Dr. M. Lánská of the Medical Faculty and Faculty hospital in Hradec Králové (electrophysiological findings in patients with age-related macular degeneration).
- Cooperation with the Eye clinic of the General University Hospital in Prague: prof. P. Lišková, Dr. B. Kousal (electrophysiological findings in patients with inherited eye disorders).

International Cooperation

- Before the Covid pandemic, we had an extensive collaboration with Prof. F. Raiskup from the Medical Faculty of the University in Dresden in the field of corneal diseases.
- Department of Ophthalmology is involved in the management of a large number of international studies, especially
 on macular diseases.
- Long-term cooperation with the Centre for rare eye diseases of University Eye clinic in Tübingen, Germany (prof. E. Zrenner, prof. K. Stingl).