Study program : Integrated academic studies for a doctor of medicine

Course unit: OPHTHALMOLOGY

Teacher in charge : Professor Suncica Sreckovic, MD, DSc, MSc

Language of instruction : ENGLISH

Prerequisites: Completed the fourth year of integrated academic studies for a doctor of medicine

ECTS: 4

Semester: summer

Course unit objective: Acquiring knowledge and skills in Ophthalmology.

Learning outcomes of Course unit:

- Knowledge about etiology, pathogenesis, clinical symptoms and signs, diagnostic methods and treatment of the inflamatory opthalmic diseases (e.g. blepharitis, dacryoadenitis, dacryocystitis, conjunctivitis, keratitis, uveitis, orbital cellulitis, etc.)

-Knowledge about etiology, pathogenesis, clinical symptoms and signs, diagnostic methods and treatment of the most prevalent opthalmic diseases in population (e.g. glaucoma, cataract)

-Knowledge about etiology, pathogenesis, clinical symptoms and signs, diagnostic methods and treatment of endocrinological end metabolic diseases with opthalmic complications (diabetic retinopathy, thyroid ophthalmopathy, systemic rheumatic diseases).

- Knowledge about tumors that afect eye, optic nerve and orbita (primary and secondary)
- Knowledge about epidemiology of opthalmic diseases.
- Knowledge about embryology of opthalmic diseases.
- Knowledge about surgical treatment of different opthalmic diseases.

-Skills of patient's examination and clinical interview in ophthalmology.

- Interpretation skills of visual acuity measurement, opthalmoscopy, pachymetry, intraocular pressure measuremnt, ultrasound, fundus camera analysis

Course unit contents

Theoretical classes

Ophthalmology is a medical discipline. It is based on fine anamnesis, opthalmological examination, clinical symptoms and signs of opthalmic diseases. Embryology of ocular tissues. Anatomy of the eye and surrounding tissues (eyelid, lacrimal gland, orbita, muscles, optic nerve). Etiology, pathogenesis, clinical symptoms and signs, diagnosis and treatment of the eyelid and lacrymal system diseases. Etiology, pathogenesis, clinical manifestations, diagnosis and treatment of conjucntival disorders (conjucntival inflammation, infection, degeneration, tumors, etc). Etiology, pathogenesis, clinical manifestations , diagnosis and treatment of cornea and sclera (congenital disorders, inflammatory conditions, infections, manifestation of systemic diseases at cornea, corneal degenerations and dystrophies). Etiology, pathogenesis, clasiffcations, clinical manifestations, diagnosis and treatment of uveitis. Etiology, pathogenesis, clinical symptoms and signs, diagnosis and treatment of the lens and vitreous body (types of cataract types, catarct surgery, complication of surgery). Etiology, pathogenesis, clinical symptoms and signs, diagnostic methods and treatment of retinal diseases (retinal detachmet, diabetic retinopathy, retinal vascular occlusion diseases). Etiology, pathogenesis, clinical manifestations, diagnostic methods and treatment of optic nerve disorders . Etiology, pathogenesis, clinical manifestations, diagnostic methods and treatment of glaucoma (production and outflow of the humor aqueous, intraocular pressure measurement, primary and secodary glaucoma), Methods of visual acuity measurement. Clinical manifestations of refractive errors (hypermetropy, miopy, astigmatism), types of contact lenses, refractive surgery. Etiology, pathogenesis, clinical manifestations, diagnosis and treatment of paralytic and nonparalytic strabismus. Etiology, pathogenesis, clinical manifestations, diagnostic methods and treatment of ocular injuries („blow out" fracture, chemical injuries, penetrating and contusions eye injuries, radiation injuries). Etiology, pathogenesis, clinical manifestations, diagnostic methods and treatment of different orbital disorders (infections, tumors, Graves ophthalmopathy). The application of therapy in ophthalmology. Hereditary eye diseases.

Practical classes

- Clinical examination of eyelids, conjunctiva, cornea, uvea, retina, optic nerve papilla
- The measurement of the intraocular pressure, examination of the tear film, examination of the visual acuity by subjective and objective methods, application of the ophthalmic therapy.
- Introduction with the functioning of the fundus camera, ultrasound, keratometer, YAG and argon lasers.
- Assisting in performing ophthalmic surgeries

Literature

- Introduction to ophthalmology, anterior segment of eye, uvea, lens and retina. Ophthalmology – textbook for medical students Prof. S. Golubovic and associates. University of Belgrade, Faculty of Medicine, 2009.
- Optic nerve, glaucoma, refraction, binocular vision, orbital diseases and eye injuries. Ophthalmology – textbook for medical students Prof. S. Golubovic and associates. University of Belgrade, Faculty of Medicine, 2009.

Number of active teaching hours				**Other classes**
Lectures: 45 classes	Practice: 30 classes	Other forms of classes:		
Teaching methods: Lectures, practice in a clinic, clinical problems solving				
Examination methods				
Exam prerequisites	**No. of points:**	**Final exam**	**No. of points:**	
Practical classes	**30**	Oral examination	**40**	
tests	**30**			