

Questionnaire for ophthalmology exams.

Part I. Clinical anatomy.

1. "Visual analyzer" and "visual organ": main departments.
2. Anatomy of the orbital cavity. Clinical significance of air sinuses diseases
In the development of orbital pathology. Superior orbital fissure syndrome: main causes and signs.
3. Eyelids: structure, blood supply, nerve supply. Eyelids' functions.
4. Extraocular muscles: structure, blood supply, nerve supply and functions.
5. Anatomy and physiology of lachrymal system: structure, blood supply, nerve supply, functions.
6. Lachrymal glands: structure, blood supply, nerve supply, functions.
7. Conjunctiva: structure, blood and nerve supply. Functions.
8. External coat of the eye-globe, its' parts and functions.
9. Cornea: structure, nourishment, nerve supply and functions.
10. Sclera: structure, blood supply, nerve supply and functions.
11. Structure of the uveal tract, its parts, blood supply, nerve supply, functions.
12. Iris: structure, blood supply, nerve supply and functions.
13. Pupil: definition, main characteristics, functional significance. Pupillary light reflexes.
14. Ciliary body: structure, blood supply, nerve supply and functions.
15. The muscles of ciliary body: structure, blood supply, nerve supply and functions.
16. Structure and functions of the choroid.
17. Anterior chamber: main elements, structure, functions.
18. Posterior chamber: main elements, structure, functions. Physiology of the aqueous humor production and circulation.
19. Structure and nourishment of the lens, its role in refraction and accommodation.
20. Vitreous body: structure and functions.
21. Retina: structure, blood supply, functions.
22. Optic nerve: structure, blood supply, functions.
23. Visual pathway. Main structural elements, topography, functions.
24. Blood supply of the eyeball: main arteries and its branches.
25. Blood supply of the eye globe' adnexa (eye lids, extraocular muscles, conjunctiva, lacrimal gland).
26. Sensory nerve supply of the eye-globe and its adnexa.
27. Motor nerve supply of eye globe and eye lids.

Part II. Physiology of vision. Accommodation. Refractive errors.

1. Physiology of central vision. Visual acuity: definition.
2. Physiology of peripheral vision. Visual field: definition, methods of examination. Classification of visual field defects.
3. Physiology of color vision, methods of examination. Main types of color vision disorders. Acquired and congenital disorders of colour vision.
4. Scotoma: definition, main types.

5. Physiological scotomas: definition, types. "Blind spot": definition, physiology, methods of examination.
6. Absolute and relative scotomas: definition and main differences.
7. Hemianopia: definition, main types and causes of development.
8. Heteronymous hemianopia: definition, causes.
9. Homonymous hemianopia: definition, causes.
10. Light adaptation. Photopic, mesopic and scotopic vision.
11. Hemeralopia: definition, causes, types.
12. Visual disorders: micropsia, macropsia, metamorphosia, photopsia. Definition and causes of these disorders.
13. Binocular vision: physiology, disorders, methods of examination.
14. Accommodation: main structural elements, mechanism, disorders.
15. Spasm of accommodation. Etiology, symptoms, signs, treatment.
16. Paralysis (palsy) of accommodation. Etiology, symptoms, treatment.
17. Accommodative asthenopia: etiology, symptoms, signs, treatment.
18. Presbyopia: etiology, symptoms, correction.
19. Myopia: definition, classification, the rules of correction by the spectacles. Surgical correction of myopia.
20. Hyperopia: definition, classification, the rules of correction by spectacles. Surgical correction of hyperopia,
21. Astigmatism: definition, classification, correction by spectacles. Surgical correction of astigmatism.
22. Simple astigmatism: definition, correction.
23. Compound astigmatism: definition, correction
24. Mixed astigmatism: definition, correction.

Part III. Pathology.

1. Acute dacryocystitis in adults: etiology, symptoms, signs, treatment.
2. Neonatal dacryocystitis: etiology, clinical features, differential diagnosis with neonatal conjunctivitis, treatment.
3. Acute dacryoadenitis: etiology, symptoms, signs, treatment.
4. Blepharitis: etiology, symptoms, signs, treatment.
5. Hordeolum and chalazion: etiology, symptoms, signs, treatment.
6. Acute bacterial conjunctivitis: etiology, mode of transmission, symptoms, signs, treatment.
7. Gonococcal conjunctivitis: mode of transmission, symptoms, signs, possible complications, treatment, prophylactics.
8. Diphtheria' conjunctivitis: etiology, mode of transmission, symptoms, signs, possible complications, treatment.
9. Trachoma: etiology, symptoms, signs, possible complications, treatment.
10. Bacterial corneal ulcer: etiology, symptoms, signs, possible complications, treatment.
11. Herpetic dendritic keratitis: etiology, pathogenesis, symptoms, signs, treatment.
12. Herpetic "geographical" keratitis: etiology, symptoms, signs, treatment.
13. Herpetic disciform keratitis: etiology, pathogenesis, symptoms, signs, treatment.
14. Phlyctenular keratitis: etiology, symptoms, signs, treatment.

15. Tuberculosis hematogenous keratitis, symptoms, signs, possible complications, treatment.
16. Syphilitic keratitis: pathogenesis, symptoms, signs, differential diagnosis, treatment.
17. Possible outcomes after keratitis: symptoms, signs, treatment.
18. Iritis and iridocyclitis: etiology, symptoms, signs, first medical aid.
19. Choroiditis: etiology, classification, symptoms, signs, complications, treatment.
20. Uveal melanomas: types according localization, symptoms, signs, diagnostic considerations, principles of treatment.
21. Senile cataracts: main types, symptoms, signs. Indications for surgery in senile cataracts and types of surgical techniques.
22. Aphakia: definition, symptoms, signs, types of correction.
23. Congenital cataracts: clinical types, symptoms, signs. Indications for surgery and surgical technique in congenital cataracts.
24. Primary glaucoma: definition, classification.
25. Closure angle glaucoma: pathogenesis, symptoms, signs, treatment. Acute attack of primary angle closed glaucoma: anatomical and hereditary predisposition, risk factors, trigger factors, symptoms, signs, first medical aid.
26. Open angle glaucoma: pathogenesis, symptoms, signs, treatment.
27. Differential diagnosis between acute attack of angle-closed glaucoma and acute iridocyclitis.
28. Congenital glaucoma: pathogenesis, symptoms, signs, treatment.
29. Penetrating injuries of the eye-globe: signs, first medical aid, treatment in ophthalmologic department.
30. Penetrating injuries of eye-globe with intraocular foreign bodies: signs, methods of revealing and methods of removal of foreign bodies.
31. Ocular contusions: symptoms, signs, first medical aid, late complications and their treatment.
32. Chemical burns of eye-globe: etiology, classification according degrees of severity, symptoms, signs, first medical aid.
33. Diabetic retinopathy: classification, symptoms, signs at eye fundus, treatment.
34. Eye fundus changes in arterial hypertension.
35. Central retinal artery obstruction: etiology, symptoms, signs, first aid, treatment, prognosis.
36. Central retinal vein obstruction: etiology, symptoms, signs, first aid, treatment, prognosis.
37. Retinal detachment: etiology, symptoms, signs, treatment.
38. Optic neuritis (papillitis): etiology, symptoms, signs, differential diagnosis, treatment.
39. Retrobulbar optic neuritis: etiology, symptoms, signs, diagnostic considerations, treatment.
40. Congestive disk (papilloedema): definition, etiology, symptoms, signs, diagnostic considerations, treatment.
41. Optic nerve atrophy: etiology, symptoms, diagnostic considerations, treatment, prognosis.

42. Retinoblastoma: definition, symptoms, signs, treatment.
43. Concomitant and paralytic strabismus: etiology, symptoms, signs, treatment.
Differential diagnosis between concomitant and paralytic strabismus

Part IV. Practice.

1. Technique of visual acuity examination.
2. Visual field examination.
3. Control technique of visual field examination (by Donders' test).
4. Kinetic perimetry, the rules of technique and normal results.
5. Static perimetry, the rules of technique and normal results.
6. Campimetry, the technique and normal results.
7. Screening-test of color vision by Yustova' tables.
8. Examination of binocular vision.
9. Method of examination of the corneal sensitivity.
10. Method of examination of corneal epithelium damage.
11. Measurement of distance between pupils.
12. Eye-lids and conjunctiva examination by means of focal light source and a loupe.
13. Eye globe examination with a focal light source and a loupe.
14. Estimation of anterior chamber depth by focal light examination.
15. Combined method of examination of the anterior part of eye globe (by focal light and two lenses).
16. Examination of the crystalline lens and vitreous body by means of transillumination method.
17. Estimation of red reflex from eye fundus by transillumination method.
18. Direct ophthalmoscopy, the rules of technique. Description of normal eye fundus image.
19. Indirect ophthalmoscopy, the rules of technique. Description of normal eye fundus image.
20. Light estimation of pupil's reflexes – direct and consensual.
21. "Optical neutralization" of the refractive power of the optical glass.
22. Eye-drops instillation and eye-ointments application procedure.
23. Estimation of eye position in orbital cavity and measurement of eye deviation angle in strabismus.
24. Practice: squeezing out lachrymal sac contents in neonatal dacryocystitis.
25. Practice: intraocular pressure estimation by means of applanation method (Maklakov' method).
26. Comberg-Baltin's method of intraocular foreign body localization.
27. Intraocular pressure' measurement by palpation method.
28. Techniques of binocular bandage making.
29. Techniques of the monocular bandages making.
30. Lachrymal ways probing, the technique and indications.
31. To prescribe eye-drops at acute bacterial conjunctivitis.
32. To prescribe eye-drops in acute and chronic allergic conjunctivitis.
33. To prescribe eye-drops at acute iridocyclitis.
34. To prescribe eye-drops at primary open-angle glaucoma.