

1. Layers of the eyeball. Structure, functions.
2. Apparatus of eye movement. Functions and innervation.
3. The fibrous coat of the eyeball. Function, structure and innervation.
4. The vascular layer of the eyeball. Structure, parts, function and blood supply.
5. Retina. Structure, blood supply and function.
6. Optic nerve, visual pathway and visual centres.
7. The transparent structures of the eyeball – the cornea, the lens and the vitreous body. Structure and function.
8. Innervation of the eye apparatus and the eyeball.
9. Blood supply of the eye.
10. The orbit. Structure.
11. Fissures of the orbit, nerves and blood vessels.
12. Lacrimal organs and tracts.
13. Intraocular muscles. Function and innervation.
14. The facial apparatus of the eye.
15. Conjunctiva. Structure.
16. Chambers of the eyeball. Iridocorneal angle.
17. Anterior chamber. Drainage system of the eye, structure of the iridocorneal angle.
18. Layers of the retina. Structure.
19. The lens-structure, topography and function.
20. The eyelids – structure, function, innervation and blood supply.
21. Visual acuity, its examination.
22. Color vision. Color vision testing.
23. Peripheral vision. Its outer aspects. Methods of examination. Pathology of visual fields.
24. Binocular vision. Methods of examination.
25. Accommodation. Its mechanism. Pathologic and physiologic alterations (spasm and palsy).
26. Age-related accommodation – correction.
27. Refraction. Its clinical types.
28. Subjective and objective methods of examination of refraction.
29. Myopia. Its development, types, degrees and complications.
30. Myopia. Diagnostics, clinic, correction and complications.
31. Hyperopia. Diagnostics, degrees and correction.
32. Clinic of ametropia. Its optical correction. Treatment.
33. Nearsightedness-the types of correction (glasses, contact lenses and surgical method).
34. Near point and far point of vision.
35. Astigmatism. Types and correction.
36. Anisometropia. Their correction.
37. Diseases of the eye lids (eczema, phlegmona, zoster).
38. Lid margin diseases (blepharitis, hordeolum, parasitic).
39. Abscess, phlegmona. Treatment.

40. Classification of conjunctivitis. Exogenous infectious conjunctivitis (acute epidemical, pneumococcus, gonorrhoeae, diphtheriae, allergic). Diagnosis, clinic, treatment and prevention.
41. Classification of conjunctivitis. Clinic and treatment.
42. Viral etiology conjunctivitis (herpes, adenoviral). Clinic, treatment and prevention.
43. Degenerative diseases of the conjunctiva (pinguecula, pterygium).  
Conjunctival tumors (papilloma, nevus, hemangioma).
44. The dry eye syndrome, diagnosis, clinic and treatment.
45. Pathology of lacrimal pathway, diagnosis, clinic and treatment.
46. Dacryocystitis (acute, chronic and infants) Phlegmona of the lacrimal sac.
47. Keratitis. Classification of keratitis, symptoms, treatment and outcome.
48. Exogenous keratitis (erosion, ulcer, fungal). Diagnosis, clinic, treatment and outcome.
49. Endogenous keratitis (tuberculosis keratitis, tuberculosis-allergic) diagnosis, treatment and outcome.
50. Herpes keratitis. Classification, clinic and treatment.
51. Neuroparalytic keratitis, vitamin A keratitis, unknown etiology keratitis. Outcome and treatment.
52. Diseases of the sclera (episcleritis, scleritis) clinic and treatment.  
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53. Diseases of the uveal tracts, clinic, treatment and complications.
54. Choroiditis, uveitis. Etiology, clinic and treatment.
55. Red eye syndrome. Diseases with red eye syndrome. Differential diagnosis.
56. Uveal tract's non-malignant (leioma, cyst, nevus) and malignant (melanoma) tumours.
57. Diseases of the vitreous body (floaters, hemorrhages, cysticercus) clinic and treatment.
58. Cataract. Clinic, types and diagnosis.
59. Age-related cataract, stages clinic and treatment.
60. Congenital cataracts. Clinic and treatment.
61. Acquired cataracts. Clinic and treatment.
62. Complicated cataracts (glaucomatic, diabetic, heterochromic). Clinic and treatment.
63. Aphakia. Correction (unilateral and bilateral).
64. Senile cataract. Modern methods of cataract surgery.
65. Congenital and acquired cataracts. Clinic and treatment.
66. Circulation of intraocular fluid. Intraocular pressure. The angle of anterior chamber, method of examination. Hypertension and hypotension.
67. Glaucoma. Types of glaucoma, diagnosis and treatment.
68. Congenital glaucoma. The cardinal signs. Treatment.
69. Dynamic classification of primary glaucoma.
70. Acute closed-angle glaucoma attack, clinic, diagnosis and treatment.
71. Glaucoma. Conservative and surgical treatment.
72. Acute glaucoma attack, acute iritis. Differential diagnosis and treatment.

73. Secondary glaucoma. Diagnosis and treatment.
74. Glaucoma. Early diagnosis and treatment.
75. Diseases of the retina. Ophthalmic picture alterations associated with hypertension.
76. Ophthalmic picture alterations associated with common diseases.
77. Retinal degeneration (chicken blindness). Treatment.
78. Destroy of retinal blood circulation (emboli of central retinal artery, spasm).
79. Thrombosis of central vein. Clinic and treatment.
80. Diabetic retinopathy. Clinic, stages and treatment.
81. Chronic visual loss. Causes, differential diagnosis and tactics.
82. Acute visual loss. Causes, clinic, diagnosis and treatment.
83. Inflammatory retinal diseases (retinitis, central serous chorioretinitis). Ophthalmoscopic picture and treatment.
84. Retinal dystrophy (senile, retinitis pigmentosa). Ophthalmoscopic picture and treatment.
85. Retinal detachment, causes, ophthalmoscopic picture and treatment.
86. Retinal tumors (retinoblastoma). Ophthalmoscopic picture, treatment and prognosis.
87. Inflammatory diseases of the optic nerve (neuritis, retrobulbar neuritis) diagnosis and treatment.
88. Edematous optic nerve. Diagnosis and treatment. Atrophy of the optic nerve.
89. Pigmentation dystrophy of the retina. Early diagnostic and treatment.
90. Retinal tumors (angiomas, glioma) Diagnosis and treatment.
91. Strabismus, primary and secondary deviation. Examination of the deviation angle. Treatment.
92. Paralytic strabismus. Diagnosis and treatment.
93. Amblyopia. Causes.
94. Symptomology of the orbit diseases.
95. Inflammatory orbital diseases (bones inflammation, phlegmona, tendonitis), treatment.
96. Orbital tumors (hemangioma, cysta, mucocele), treatment.
97. Malignant tumors of the orbit (sarcoma, carcinoma), treatment.
98. Syndrome of superior orbit fissure.
99. Traumas of the eye (erosion, hemorrhage, traumatic cataract, retinal holes and retinal detachment). Diagnosis and treatment.
100. Penetrating injury of the eye. Diagnostic, treatment, complications. Diagnostic and localization methods of intraocular foreign body.
101. The complications of the penetrating injury (endophthalmitis, panophthalmitis), diagnostic and treatment.
102. Intraocular wounds, care for wounds and emergency.
103. Eye burning (thermal, chemical, radiation), primary care, treatment and prognosis.
104. Types of eye burning, complications and treatment.
105. The eyelid wounds.