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OF OPHTHALMOLOGY

6

Pediatric Ophthalmology and Strabismus

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BCSC
Basic and Clinical
Science Course™



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Contents

- General Introduction xix
- Objectives 1**
- PART I Strabismus 3**
- 1 The Pediatric Eye Examination 5**
 - Preparation 5
 - Examination: General Considerations and Strategies. 6
 - Examination: Specific Elements. 7
 - Visual Acuity Assessment 7
 - Alternative Methods of Visual Acuity Assessment
 - in Preverbal Children 10
 - Red Reflex Examination (Brückner Test) 11
 - Dynamic Retinoscopy 11
 - Visual Field Testing 11
 - Pupil Testing 11
 - Anterior Segment Examination 11
 - Intraocular Pressure Measurement 12
 - Cycloplegic Refraction 12
 - Fundus Examination 13
 - Examination of the Uncooperative Child. 14
- 2 Strabismus Terminology 15**
 - Prefixes and Suffixes 15
 - Prefixes 15
 - Suffixes 16
 - Strabismus Classification Terms 16
 - Age of Onset 16
 - Fixation 16
 - Variation of the Deviation Size With Gaze Position
 - or Fixating Eye. 16
 - Miscellaneous Terms 17
 - Abbreviations for Types of Strabismus 17
- 3 Anatomy of the Extraocular Muscles 19**
 - Origin, Course, Insertion, Innervation, and Action of the
 - Extraocular Muscles 19
 - Horizontal Rectus Muscles 20
 - Vertical Rectus Muscles 20
 - Oblique Muscles 20

Levator Palpebrae Superioris Muscle	23
Relationship of the Rectus Muscle Insertions	23
Blood Supply of the Extraocular Muscles.	24
Arterial System	24
Venous System	24
Structure of the Extraocular Muscles	24
Orbital and Fascial Relationships	25
Adipose Tissue	25
Muscle Cone	25
Muscle Capsule	26
The Tenon Capsule	26
Pulley System.	28
Anatomical Considerations During Surgery	30
4 Amblyopia	33
Epidemiology	33
Detection and Screening.	33
Pathophysiology	34
Classification.	34
Strabismic Amblyopia	34
Refractive Amblyopia	35
Visual Deprivation Amblyopia	36
Evaluation	36
Treatment	37
Cataract Removal	37
Refractive Correction	37
Occlusion and Penalization.	38
Complications of Therapy	39
5 Motor Physiology	41
Basic Principles and Terms.	41
Axes of Fick and Ocular Rotations.	41
Positions of Gaze	42
Extraocular Muscle Action	42
Eye Movements.	43
Motor Units	43
Monocular Eye Movements.	43
Binocular Eye Movements	48
Supranuclear Control Systems for Eye Movement	52
6 Sensory Physiology and Pathology	53
Physiology of Normal Binocular Vision	53
Retinal Correspondence	53
Fusion	54
Selected Aspects of the Neurophysiology of Vision	55
Visual Development	56
Effects of Abnormal Visual Experience on the Retinogeniculocortical Pathway	56

Abnormalities of Binocular Vision	59
Visual Confusion	59
Diplopia	59
Sensory Adaptations in Strabismus	60
Suppression	60
Anomalous Retinal Correspondence	62
Monofixation Syndrome	63

7 Diagnostic Evaluation of Strabismus

and Torticollis	65
History and Presenting Features of Strabismus	65
Assessment of Ocular Alignment	65
Positions of Gaze	65
Cover Tests	66
Corneal Light Reflex Tests	69
Subjective Tests	70
Assessment of Eye Movements	72
Ocular Rotations	72
Convergence	73
Fusional Vergence	73
Special Tests	74
Motor Tests	74
Assessment of the Field of Single Binocular Vision	75
3-Step Test	75
Prism Adaptation Test	77
Torticollis: Differential Diagnosis and Evaluation	77
Ocular Torticollis	78
Tests of Sensory Adaptation and Binocular Cooperation	79
Red-Glass Test	80
Bagolini Lenses	80
4Δ Base-Out Prism Test	81
Afterimage Test	83
Amblyoscope Testing	84
Worth 4-Dot Test	84
Stereoacuity Testing	86
Related Videos	86

8 Esodeviations 87

Epidemiology	87
Pseudoesotropia	87
Infantile (Congenital) Esotropia	88
Pathogenesis	89
Evaluation	89
Management	90
Accommodative Esotropia	91
Pathogenesis and Types of Accommodative Esotropia	91
Evaluation	92
Management	92

Acquired Nonaccommodative Esotropias	94
Basic Acquired Nonaccommodative Esotropia	94
Cyclic Esotropia.	95
Sensory Esotropia	95
Divergence Insufficiency	95
Spasm of the Near Reflex.	96
Consecutive Esotropia	96
Nystagmus and Esotropia	97
Incomitant Esotropia	97
Sixth Nerve Palsy	97
Other Forms of Incomitant Esotropia	98
9 Exodeviations	99
Pseudoexotropia	99
Exophoria	99
Intermittent Exotropia.	99
Clinical Characteristics	100
Evaluation	100
Classification	101
Treatment	101
Convergence Weakness Exotropia.	104
Constant Exotropia	104
Infantile Exotropia	105
Sensory Exotropia.	105
Consecutive Exotropia	106
Other Forms of Exotropia	106
Exotropic Duane Retraction Syndrome.	106
Neuromuscular Abnormalities	106
Dissociated Horizontal Deviation	106
Convergence Paralysis	106
10 Pattern Strabismus	109
Etiology	109
Clinical Features and Identification	112
V Pattern	112
A Pattern.	112
Y Pattern.	112
X Pattern.	113
λ Pattern.	113
Management	113
General Principles.	113
Treatment of Specific Patterns.	114
11 Vertical Deviations	117
A Clinical Approach to Vertical Deviations.	117
Incomitant Vertical Tropias	118
Overelevation and Overdepression in Adduction	118
Superior Oblique Muscle Palsy	122

Inferior Oblique Muscle Palsy	126
Other Incomitant Vertical Tropias	127
Comitant Vertical Tropias	128
Monocular Elevation Deficiency	128
Orbital Floor Fractures	129
Other Comitant Vertical Tropias	131
Dissociated Vertical Deviation	131
Clinical Features	131
Management	132
Related Videos	132
12 Special Forms of Strabismus	133
Congenital Cranial Dysinnervation Disorders	133
Duane Retraction Syndrome	133
Congenital Fibrosis of the Extraocular Muscles	136
Möbius Syndrome	137
Miscellaneous Special Forms of Strabismus	138
Brown Syndrome	138
Third Nerve Palsy	140
Sixth Nerve Palsy	142
Thyroid Eye Disease	142
Chronic Progressive External Ophthalmoplegia	144
Myasthenia Gravis	144
Esotropia and Hypotropia Associated With High Myopia	145
Internuclear Ophthalmoplegia	146
Ocular Motor Apraxia	147
Superior Oblique Myokymia	147
Strabismus Associated With Other Ocular Surgery	148
13 Childhood Nystagmus	149
General Features	149
Nomenclature	149
Evaluation	150
History	150
Ocular Examination	151
Types of Childhood Nystagmus	152
Congenital Nystagmus	152
Acquired Nystagmus	155
Nystagmus-Like Disorders	156
Convergence-Retraction Nystagmus	156
Opsoclonus	156
Treatment	157
Prisms	157
Surgery for Nystagmus	157
14 Surgery of the Extraocular Muscles	161
Evaluation	161
Indications for Surgery	161

Planning Considerations	162
Visual Acuity	162
General Considerations	162
Incomitance	163
Cyclovertical Strabismus	164
Prior Surgery	164
Surgical Techniques for the Extraocular Muscles and Tendons	164
Approaches to the Extraocular Muscles	164
Rectus Muscle Weakening Procedures	165
Rectus Muscle Strengthening Procedures	165
Rectus Muscle Surgery for Hypotropia and Hypertropia	165
Adjustable Sutures	166
Oblique Muscle Weakening Procedures	167
Oblique Muscle Tightening (Strengthening) Procedures	168
Stay Sutures	168
Transposition Procedures	168
Posterior Fixation	169
Complications of Strabismus Surgery	169
Diplopia	169
Unsatisfactory Alignment	170
Iatrogenic Brown Syndrome	170
Anti-Elevation Syndrome	170
Lost and Slipped Muscles	170
Pulled-in-Two Syndrome	171
Perforation of the Sclera	171
Postoperative Infections	171
Foreign-Body Granuloma and Allergic Reaction	172
Epithelial Cyst	172
Conjunctival Scarring	173
Adherence Syndrome	173
Dellen	173
Anterior Segment Ischemia	174
Change in Eyelid Position	174
Refractive Changes	175
Anesthesia for Extraocular Muscle Surgery	175
Methods	175
Postoperative Nausea and Vomiting	176
Oculocardiac Reflex	176
Malignant Hyperthermia	176
Chemodenervation Using Botulinum Toxin	176
Pharmacology and Mechanism of Action	176
Indications, Techniques, and Results	177
Complications	177
Related Videos	178

PART II	Pediatric Ophthalmology	179
15	Growth and Development of the Eye	181
	Normal Growth and Development	181
	Dimensions of the Eye	181
	Refractive State	183
	Orbit and Ocular Adnexa	183
	Cornea, Iris, Pupil, and Anterior Chamber	183
	Intraocular Pressure	184
	Extraocular Muscles	184
	Retina	184
	Visual Acuity and Stereoacuity	185
	Abnormal Growth and Development	187
16	Decreased Vision in Infants and Children	189
	Normal Visual Development	189
	Evaluation of the Infant With Decreased Vision	190
	Classification of Visual Impairment in Infants and Children	190
	Delayed Visual Maturation	190
	Pregeniculate Visual Impairment	191
	Retrogeniculate Visual Impairment, or Cerebral Visual Impairment	191
	Pediatric Low Vision Rehabilitation	192
17	Eyelid Disorders	195
	Congenital Eyelid Disorders	195
	Telecanthus	195
	Dystopia Canthorum	195
	Cryptophthalmos	195
	Ablepharon	197
	Congenital Coloboma of the Eyelid	197
	Ankyloblepharon	197
	Congenital Ectropion	198
	Congenital Entropion	198
	Epiblepharon	198
	Congenital Tarsal Kink	198
	Distichiasis	198
	Euryblepharon	198
	Epicanthus	199
	Palpebral Fissure Slants	199
	Blepharophimosis–Ptosis–Epicanthus Inversus Syndrome	199
	Congenital Ptosis	200
	Marcus Gunn Jaw-Winking Syndrome	201
	Infectious and Inflammatory Eyelid Disorders	202
	Neoplasms and Other Noninfectious Eyelid Lesions	202
	Capillary Malformations	202
	Congenital Nevocellular Nevi of the Skin	203

Other Acquired Eyelid Conditions	203
Trichotillomania	203
Excessive Blinking.	203
18 Orbital Disorders	205
Abnormal Interocular Distance: Terminology and Associations	205
Congenital and Developmental Disorders:	
Craniofacial Malformations	205
Craniosynostosis	205
Nonsynostotic Craniofacial Conditions	213
Infectious and Inflammatory Conditions.	216
Preseptal Cellulitis	216
Orbital Cellulitis	216
Childhood Orbital Inflammation	218
Neoplasms.	220
Differential Diagnosis	220
Primary Malignant Neoplasms	221
Metastatic Tumors.	222
Hematopoietic, Lymphoproliferative, and Histiocytic Neoplasms	222
Benign Tumors	223
Ectopic Tissue Masses	227
Cystic Lesions	227
Teratoma.	230
Ectopic Lacrimal Gland	230
19 Lacrimal Drainage System Abnormalities	231
Congenital and Developmental Anomalies	231
Atresia of the Lacrimal Puncta or Canaliculi	231
Congenital Lacrimal Fistula	232
Dacryocystocele	232
Nasolacrimal Duct Obstruction.	234
Clinical Features	234
Nonsurgical Management	235
Surgical Management	236
20 Diseases of the Cornea, Anterior Segment, and Iris	241
Congenital and Developmental Anomalies of the Cornea.	241
Abnormalities of Corneal Size and Shape.	241
Abnormalities of Peripheral Corneal Transparency	242
Abnormalities of Central and Diffuse Corneal Transparency	244
Treatment of Corneal Opacities	248
Congenital and Developmental Anomalies of the Globe	249
Microphthalmos	249
Anophthalmos	249
Nanophthalmos.	249

Congenital and Developmental Anomalies of the Iris and Pupil	249
Abnormalities of the Iris	249
Abnormalities in the Size, Shape, or Location of the Pupil.	254
Acquired Corneal Conditions	255
Keratitis	255
Systemic Diseases Affecting the Cornea or Iris	256
Metabolic Disorders Affecting the Cornea or Iris	256
Other Systemic Diseases Affecting the Cornea or Iris.	257
Tumors of the Cornea, Iris, and Anterior Segment.	258
Cornea	258
Iris	258
Ciliary Body	259
Miscellaneous Clinical Signs	260
Pediatric Iris Heterochromia	260
Anisocoria	260
21 External Diseases of the Eye	263
Infectious Conjunctivitis.	263
Ophthalmia Neonatorum	264
Bacterial Conjunctivitis	265
Viral Conjunctivitis	267
Inflammatory Disease	270
Blepharitis	270
Ocular Allergy	270
Ligneous Conjunctivitis	273
Miscellaneous Conjunctival Disorders	273
Papillomas	273
Conjunctival Epithelial Inclusion Cysts.	273
Conjunctival Nevi.	273
Ocular Melanocytosis	274
Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis	274
22 Pediatric Glaucomas	277
Genetics.	277
Classification.	277
Primary Childhood Glaucoma	278
Primary Congenital Glaucoma	278
Juvenile Open-Angle Glaucoma.	282
Secondary Childhood Glaucoma	283
Glaucoma Associated With Nonacquired Ocular Anomalies	283
Glaucoma Associated With Nonacquired Systemic Disease or Syndrome	283
Secondary Glaucoma Associated With an Acquired Condition	283
Glaucoma Following Cataract Surgery	284
Treatment	284
Surgical Therapy	285
Medical Therapy	287
Prognosis and Follow-Up	289

23	Childhood Cataracts and Other Pediatric Lens Disorders	291
	Pediatric Cataracts	291
	General Features	291
	Morphology	292
	Evaluation	297
	Examination	297
	Cataract Surgery in Pediatric Patients	299
	Timing of the Procedure	299
	Intraocular Lens Use in Children	299
	Management of the Anterior Capsule	300
	Lensectomy Without Intraocular Lens Implantation	301
	Lensectomy With Intraocular Lens Implantation	301
	Postoperative Care	302
	Complications	303
	Visual Outcome After Cataract Extraction	303
	Structural or Positional Lens Abnormalities	304
	Congenital Aphakia	304
	Spherophakia	304
	Coloboma	304
	Dislocated Lenses in Children	305
	Isolated Ectopia Lentis	305
	Ectopia Lentis et Pupillae	305
	Marfan Syndrome	306
	Homocystinuria	306
	Weill-Marchesani Syndrome	307
	Sulfite Oxidase Deficiency	308
	Treatment	308
24	Uveitis in the Pediatric Age Group	309
	Epidemiology and Genetics	309
	Classification	309
	Anterior Uveitis	310
	Juvenile Idiopathic Arthritis	310
	Tubulointerstitial Nephritis and Uveitis Syndrome	313
	Kawasaki Disease	313
	Other Causes of Anterior Uveitis	313
	Intermediate Uveitis	314
	Posterior Uveitis	314
	Toxoplasmosis	314
	Toxocariasis	314
	Panuveitis	315
	Sarcoidosis	315
	Familial Juvenile Systemic Granulomatosis	316
	Vogt-Koyanagi-Harada Syndrome	316
	Other Causes of Posterior Uveitis and Panuveitis	316

Masquerade Syndromes	317
Evaluation of Pediatric Uveitis	317
Treatment of Pediatric Uveitis	318
Management of Inflammation	318
Surgical Treatment of Uveitis Complications	320
25 Disorders of the Retina and Vitreous	321
Congenital and Developmental Abnormalities	321
Persistent Fetal Vasculature	321
Retinopathy of Prematurity	321
Hereditary Retinal Disease	330
Hereditary Macular Dystrophies	333
Hereditary Vitreoretinopathies	335
Infections	337
Herpes Simplex Virus and Cytomegalovirus	337
Human Immunodeficiency Virus	338
Tumors	338
Choroidal and Retinal Pigment Epithelial Lesions	338
Retinoblastoma	339
Acquired Disorders	347
Coats Disease.	347
Systemic Diseases and Disorders With Retinal Manifestations.	348
Diabetes Mellitus	348
Albinism.	349
26 Optic Disc Abnormalities	353
Developmental Anomalies	353
Optic Nerve Hypoplasia	353
Morning Glory Disc Anomaly	355
Coloboma of the Optic Nerve.	356
Myelinated Retinal Nerve Fibers.	356
Tilted Disc Syndrome	357
Bergmeister Papilla	358
Megalopapilla.	358
Peripapillary Staphyloma.	358
Optic Nerve Aplasia	358
Melanocytoma	359
Optic Atrophy	359
Dominant Optic Atrophy, Kjer Type	359
Recessive Optic Atrophy	360
Behr Optic Atrophy	360
Leber Hereditary Optic Neuropathy	360
Optic Neuritis	361
Papilledema	362
Idiopathic Intracranial Hypertension	363
Pseudopapilledema	363
Drusen	364

27	Ocular Trauma in Childhood	367
	Accidental Trauma	367
	Superficial Injury	368
	Penetrating Injury	368
	Blunt Injury	369
	Orbital Fractures	371
	Traumatic Optic Neuropathy	372
	Nonaccidental Trauma	373
	Abusive Head Trauma	373
	Ocular Injury Secondary to Nonaccidental Trauma	376
28	Ocular Manifestations of Systemic Disease	377
	Diseases due to Chromosomal Abnormalities	377
	Inborn Errors of Metabolism	377
	Familial Oculorenal Syndromes	383
	Phakomatoses	383
	Neurofibromatosis	384
	Tuberous Sclerosis	388
	Von Hippel–Lindau Disease	390
	Sturge-Weber Syndrome	392
	Ataxia-Telangiectasia	394
	Incontinentia Pigmenti	395
	Wyburn-Mason Syndrome	396
	Klippel-Trénaunay-Weber Syndrome	397
	Intrauterine or Perinatal Infection	398
	Toxoplasmosis	398
	Rubella	399
	Cytomegalovirus	400
	Herpes Simplex Virus	401
	Syphilis	401
	Lymphocytic Choriomeningitis	402
	Malignant Disease	402
	Leukemia	402
	Neuroblastoma	403
	Basic Texts	405
	Related Academy Materials	407
	Requesting Continuing Medical Education Credit	409
	Study Questions	411
	Answer Sheet for Section 6 Study Questions	421
	Answers	423
	Index	429

General Introduction

The Basic and Clinical Science Course (BCSC) is designed to meet the needs of residents and practitioners for a comprehensive yet concise curriculum of the field of ophthalmology. The BCSC has developed from its original brief outline format, which relied heavily on outside readings, to a more convenient and educationally useful self-contained text. The Academy updates and revises the course annually, with the goals of integrating the basic science and clinical practice of ophthalmology and of keeping ophthalmologists current with new developments in the various subspecialties.

The BCSC incorporates the effort and expertise of more than 90 ophthalmologists, organized into 13 Section faculties, working with Academy editorial staff. In addition, the course continues to benefit from many lasting contributions made by the faculties of previous editions. Members of the Academy Practicing Ophthalmologists Advisory Committee for Education, Committee on Aging, and Vision Rehabilitation Committee review every volume before major revisions. Members of the European Board of Ophthalmology, organized into Section faculties, also review each volume before major revisions, focusing primarily on differences between American and European ophthalmology practice.

Organization of the Course

The Basic and Clinical Science Course comprises 13 volumes, incorporating fundamental ophthalmic knowledge, subspecialty areas, and special topics:

- 1 Update on General Medicine
- 2 Fundamentals and Principles of Ophthalmology
- 3 Clinical Optics
- 4 Ophthalmic Pathology and Intraocular Tumors
- 5 Neuro-Ophthalmology
- 6 Pediatric Ophthalmology and Strabismus
- 7 Orbit, Eyelids, and Lacrimal System
- 8 External Disease and Cornea
- 9 Intraocular Inflammation and Uveitis
- 10 Glaucoma
- 11 Lens and Cataract
- 12 Retina and Vitreous
- 13 Refractive Surgery

In addition, a comprehensive Master Index allows the reader to easily locate subjects throughout the entire series.

References

Readers who wish to explore specific topics in greater detail may consult the references cited within each chapter and listed in the Basic Texts section at the back of the book.

These references are intended to be selective rather than exhaustive, chosen by the BCSC faculty as being important, current, and readily available to residents and practitioners.

Videos

This edition of Section 6, *Pediatric Ophthalmology and Strabismus*, includes videos related to topics covered in the book (see the Related Videos section in Chapters 7, 11, and 14). The videos were selected by members of the BCSC faculty and are available to readers of the print and electronic versions of Section 6. Mobile-device users can scan the QR code below (a QR-code reader must already be installed on the device) to access the video content.

Study Questions and CME Credit

Each volume of the BCSC is designed as an independent study activity for ophthalmology residents and practitioners. The learning objectives for this volume are given on page 1. The text, illustrations, and references provide the information necessary to achieve the objectives; the study questions allow readers to test their understanding of the material and their mastery of the objectives. Physicians who wish to claim CME credit for this educational activity may do so by following the instructions given at the end of the book.

Conclusion

The Basic and Clinical Science Course has expanded greatly over the years, with the addition of much new text, numerous illustrations, and video content. Recent editions have sought to place greater emphasis on clinical applicability while maintaining a solid foundation in basic science. As with any educational program, it reflects the experience of its authors. As its faculties change and medicine progresses, new viewpoints emerge on controversial subjects and techniques. Not all alternate approaches can be included in this series; as with any educational endeavor, the learner should seek additional sources, including Academy Preferred Practice Pattern Guidelines.

The BCSC faculty and staff continually strive to improve the educational usefulness of the course; you, the reader, can contribute to this ongoing process. If you have any suggestions or questions about the series, please do not hesitate to contact the faculty or the editors.

The authors, editors, and reviewers hope that your study of the BCSC will be of lasting value and that each Section will serve as a practical resource for quality patient care.

Objectives

Upon completion of BCSC Section 6, *Pediatric Ophthalmology and Strabismus*, the reader should be able to

- describe evaluation techniques for young children that provide the maximum information gain with the least trauma and frustration
- describe the anatomy and physiology of the extraocular muscles
- explain the classification and diagnosis of amblyopia, as well as the treatment options
- describe the commonly used tests for the diagnosis and measurement of strabismus
- classify the various esodeviations and exodeviations, and describe the management of each type
- identify pattern and vertical strabismus, as well as special forms of strabismus, and formulate a treatment plan for each type
- describe the features of the various forms of nystagmus and understand their significance
- list the possible complications of strabismus surgery, and describe guidelines to minimize them
- design an approach to the diagnosis of decreased vision in children, and list resources available to these patients
- differentiate among various causes of congenital and acquired ocular infections in children, and formulate a logical plan for the diagnosis and management of each type
- list the most common lacrimal drainage system abnormalities seen in children and formulate a management plan
- list the most common diseases and malformations of the cornea, anterior segment, and iris seen in children

- describe the diagnostic findings and treatment options for childhood glaucoma
 - identify common types of childhood cataract and other lens disorders
 - construct a diagnostic and management plan for childhood cataracts
 - identify appropriate diagnostic tests for pediatric uveitis
 - differentiate among various vitreoretinal, optic disc, and metabolic diseases and disorders found in children
 - list the characteristics of ocular tumors and phakomatoses seen in children
 - describe the characteristic findings of accidental and nonaccidental ocular trauma in childhood
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