Step by Step

Clinical Management of Strabismus

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Step by Step

Clinical Management of Strabismus

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Step by Step Clinical Management of Strabismus

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Printed at Ajanta
Dedicated
to
My beloved Parents
with Gratitude.......  

Rivers all flow home to the ocean
Leaving name and form behind
So does the knowing man seek
The beyond of the beyond
Freed from name and form

Mundaka Upanishad
Strabismology has evoked much awe and fear in the minds of ophthalmologists from times immemorial. Wrapped in myths and highly individualized management, a scientific step by step approach to this ophthalmic speciality has been the prerogative of only a few people trained in the art and science of strabismology in the past.

However, over the past decade, there has been a rapid evolution of techniques and technology in all ophthalmic subspecialities the world over and the field of strabismology is no exception. With the information explosion on the internet, it has become important for the general ophthalmologists to be aware of the work being done in different ophthalmic specialities, so as to provide basic level care to the patient and refer appropriately.

I believe that this well illustrated book fulfills a long felt need for a systematic overview of the principles, current practices and recent advances in the management of strabismus and would be of immense help to ophthalmic clinicians and postgraduate students.

I wish this book all success and hope that it is able to decrease the phobia in the minds of many regarding this highly challenging ophthalmic sub-speciality.

**Professor (Dr) AK Gupta**
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Formerly
Director, Guru Nanak Eye Center
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The speciality of strabismus has expanded immensely in the past decade. Better understanding of the different pathophysiological mechanisms leading to strabismus and amblyopia and the intricacies of their subsequent management has long necessitated the requirement of a concise and comprehensive compilation related to the various facets associated with this speciality.

This simple and lucid handbook on strabismus, written in an easy to understand format provides a plethora of information regarding the basics of strabismus and amblyopia management and gives a comprehensive overview of the recent advances in the speciality.

It gives me immense pleasure to forward this extremely well written book by Dr Zia Chaudhuri, whom I have known for a long time, both as my student and as my junior colleague. She is completely dedicated to the speciality of strabismus and has been able to effectively express and project the different concepts of this subject in a very simplified and clear manner in this book.

I wish this book all success and am confident that it will benefit the general ophthalmologists, the strabismologists and the ophthalmic residents alike.

Dr JC Das  MD  
Senior Consultant  
Shroff Eye Center  
A-9 Kailash Colony, New Delhi  
Ex-Director Professor of Ophthalmology  
Guru Nanak Eye Center  
Maulana Azad Medical College  
New Delhi
The great strabismologist Alfred Bielschowsky once mentioned in his famous lectures on motor anomalies (1938) that “Not only the novice but also many well trained and experienced oculists consider motor anomalies to be the most difficult field in ophthalmology because of the great variety of signs and symptoms which frequently cannot be reconciled with one another. In examining and treating motor anomalies, one never loses an uneasy feeling of incompetence until one has become familiar with the physiologic fundamentals.”

This fast expanding ophthalmic sub-speciality is a field that encompasses a wide range of disorders of both congenital and acquired origin involving abnormalities of ocular motility and alignment, the final consequence in most cases being loss of binocular co-ordination of the eyes. To be able to perceive depth is a divine gift! When one considers the intricate complexity of the biology of vision, including binocular vision, the perfection of it all is often awe-inspiring. The loss of it due to strabismus inspires most of us in this speciality to aggressively pursue means and ways to redeem and restore this beautiful gift to those who have been denied the same, whenever possible.

This small handbook is aimed to provide a simple and comprehensive outline of the management protocols for dealing with different forms of ocular motility disorders and strabismus. The basic clinical work-up of a patient with strabismus, the management of amblyopia, the importance of refraction in the management of these conditions, both as an adjunct and as a substitute to surgery and the principles of non-surgical and surgical management of strabismus have been briefly described. Some of the surgical techniques have been demonstrated in the DVD accompanying this book. A short summary of different clinical presentations of strabismus and ocular motility disorders have been elucidated, highlighting the main features. It has been attempted to simplify complex concepts and illustrate the same with diagrams and photographs, wherever indicated.

With expanding human knowledge and skills, many conditions previously believed to be of idiopathic multifactorial origins, have been identified and localized with increasing precision to anomalies in particular genes or chromosomes. The same has been true for some of the more exotic strabismus syndromes which have now been re-classified according to the abnormalities in the genes and chromosomes found. A short overview of strabismus with strong genetic basis has been provided to orient the busy practitioner and the even busier ophthalmic postgraduate student to them. It is hoped that this short, illustrated handbook is found useful by the readers.

Zia Chaudhuri
To acknowledge the contributions of all those who help complete one’s work is always incomplete for there are so many who are taken for granted and so many who remain unrecalled! Even the night watchman, who lets you sit for an extra hour when your writing speed is at its optimum, contributes both quantitatively and qualitatively to your work! I take this opportunity to thank all those people, unremembered and taken for granted who have helped me complete this handbook. This includes all my patients, young and old who have made this book possible!

I remain forever indebted to my parents for the guidance and support that I have always received from them for the goals I set for myself.

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I specially thank Aashima and Saurabh, who have transformed difficult “strabismological concepts” into “animation” realities that has helped me express the subject well. I thank Mr Deepak Negi, who had initiated me into the art of video-editing, enabling me to present different surgical techniques in strabismus management in a lucid manner.

I thank Shri JP Vij (Chairman and Managing Director) of Jaypee Brothers Medical Publishers (P) Ltd. and his entire team for the tireless efforts they have put in to make this book a living reality. I especially thank Mr Tarun Duneja General Manager (Publishing), Mr PS Ghuman (Senior Production Manager) and Mr Sunil Gupta (Production Manager) for ensuring that the book is published in time, against all odds! I thank Mr Subrato Adhikari (Author Co-ordinator) for his enthusiastic persistence in making me write this book, Mr Manoj Pahuja (Graphic Designer) for the expressive diagrams and Ms Kamlesh Bisht (DTP Operator) for the excellent typesetting of this book. I also thank Mr Shakiluzzaman, Mr Akhilesh Dubey and Mr Aravind Kumar (Proof Readers) for being the final guards of control.

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The experience of writing this book has been a source of great professional and personal introspection for me. I pay my obeissances to the Almighty for His blessings.
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