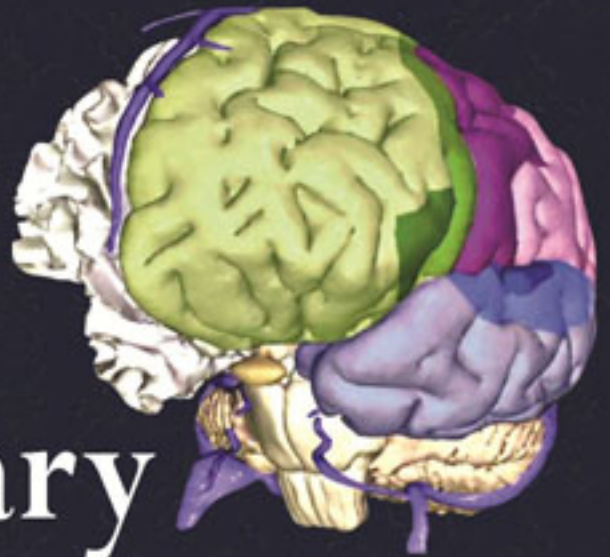


Textbook of
Contemporary
NEUROSURGERY



Vincent A Thamburaj

Foreword
Robin Sengupta

JAYPEE

Textbook of Contemporary NEUROSURGERY

Textbook of Contemporary Neurosurgery is for the young neurosurgeons and those in related disciplines. The entire field of general neurosurgery, including neurorehabilitation, is covered in a reader-friendly way for a holistic learning experience. Contributory authors include experts from Asia, Europe and North America.

- Perioperative care is covered in a concise and practical style.
- Essentials of neurodiagnostics, anesthesia and other neurosurgical adjuncts are adequately compiled.
- Discussion on developmental disorders is very illustrative.
- Section on 'Infections in Neurosurgery' is informative, especially to the Western world.
- All aspects of neurological trauma, including nerve injuries, are reviewed.
- The heterogeneous group of cerebrovascular lesions is discussed comprehensively.
- The wide spectrum of CNS tumors is extensively described.
- Neurosurgical interest in spine surgery is reflected in 'Spine and Spinal Cord' section.
- Management strategies in functional disorders are amply discussed.
- Neurosurgery relevant ethics, genetics, stem cell therapy, nutritional support, physiotherapy and evidence-based medicine are some of the chapters of common interest.

Vincent A Thamburaj is a senior Consultant Neurosurgeon, Department of Neurosurgery Apollo Specialty Hospitals, Chennai, Tamil Nadu, India, with active interest in training postgraduates for over 18 years. He had his initial training under pioneer neurosurgeon, Professor B Ramamurthi and later in Ireland and UK. He is known for his work in neurovascular and transoral and transnasal procedures. He has delivered a number of guest lectures in India and abroad. His teaching website (www.thamburaj.com) is well received by the neurosurgical fraternity, the world over.



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Dedicated to
All my patients
and
their families



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Foreword

‘Teaching is the highest form of understanding.’ — *Aristotle* (384–322 BC), Greek Philosopher

Today, Neurosurgeons have to know much more to keep up with the latest method of diagnosis and treatment. To fulfill their needs a contemporary textbook is therefore an absolute necessity and long overdue. The first Textbook of Neurosurgery by pioneer giants in Indian Neurosurgery Dr B Ramamurthi and Dr PN Tandon was published in 1980. More than 30 years later, Dr Vincent A Thamburaj, whom I know from his years in England, has taken the audacious and arduous task to write another textbook on Neurosurgery.

This book covers the entire field of general neurosurgery, including neurorehabilitation. The chapters on Evidence-based Medicine for Neurosurgeons, Ethics in Neurosurgery, Genetics in Neurosurgery, Familial Tumor Syndromes of the Central Nervous System, Biomechanics of Spinal Stabilization, Stem Cells in Neurology, and Neurological Physiotherapy are some of the chapters not usually found in general neurosurgical textbooks. The discussion on developmental disorders is very illustrative. The section on ‘Infections in Neurosurgery’ will be informative to the Western world. The wide spectrum of brain tumors has been discussed most comprehensively. The recent neurosurgical interest in spine surgery is well reflected in section ‘Spine and Spinal Cord Disorders’.

As Vincent mentions in his preface, the book is primarily intended for the postgraduate students, neurosurgeons who have to look after all kinds of neurosurgical problems in the community and the medical practitioners who need some guidance about neurosurgical problems in their own specialties. However, I find that the quality of information and presentations in the book can even help the neurosurgical experts in the areas of their own interest. Dr B Ramamurthi would have been delighted to see this book coming from his own student, Dr Vincent A Thamburaj and from his beloved city, Chennai, from where he radiated Neurosurgical gospel throughout India and became the Ambassador of Indian Neurosurgery to the rest of the world. Most of the premiere institutions, which are well known for education and research, are losing their talents to the corporate sector. It is therefore surprising that Vincent could assemble so many Indian Neurosurgeons to contribute to this book. I notice that apart from few Japanese and Western experts, the authors are all Indian. What a testimony to the persuasive power of the editors! I congratulate Vincent and his team for creating another milestone in Indian Neurosurgery. I am sure that this timely, comprehensive and up-to-date textbook will be well received by Neurosurgeons, the world over.

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Preface

‘There are moments in a man’s life when purpose comes to him suddenly.’

— *Wilder Graves Penfield* (1891–1976), Canadian Neurosurgeon

The genesis of this textbook can be traced back to my online tome ‘Neurosurgery on the web...’ It was personally very gratifying to see the neurosurgery community adopt and benefit from this online manual. Generous feedback from the community encouraged me to further develop this work and then to mold the contents into textbook form. Over the course of multiple iterations of additions, deletions and edits, the content was eventually shaped into the final product that you now see.

This textbook is primarily directed at Neurosurgical Trainees. Young Neurosurgeons and those in related disciplines will also appreciate and benefit from the material in the book. While the textbook covers topics that every general Neurosurgeon should be knowledgeable at, it is beyond the scope of this work to address the specific needs of subspecialists.

There are 121 chapters organized into 14 sections in two volumes. Each chapter attempts to draw together all current relevant information and integrates theory and practice in contemporary neurosurgery for a comprehensive learning experience. The concise and practical style is deliberately chosen to make this textbook easy to consume. Each chapter begins with an introduction to the topic and ends with key practice points for a quick review of the topic. All chapters follow the same format so that there are no inconsistencies in style or content. Every effort has been made to avoid redundancy, which is often inevitable in a textbook with multiple authors.

During my FRCS days, I really enjoyed reading Walter and Israel’s General Pathology. They set the bar for me in terms of what a medical textbook ought to be. My goal was to attempt to write a book that is as expansive and as approachable as that seminal work. It is my fervent hope that you, the reader, find this book informative, interesting and easy to read.

I wish to thank all the authors who have contributed so generously of their experience and their time and the staff of Jaypee Brothers Medical Publishers (P) Ltd, New Delhi, India who were most helpful in getting the book published.

I would especially like to thank Narayanan Raghavachari for his help with proofreading, Ravikanth Balaji for his help with figures, and Anil Sangli and Samit S Mehta who shared in the conception and planning of this textbook.

Vincent A Thamburaj



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