



COMPREHENSIVE

NEUROSURGERY



A. Vincent Thamburaj

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COMPREHENSIVE NEUROSURGERY

This book intends to be a guide to trainees, young neurosurgeons and those in allied disciplines. Wide spectrum of neurosurgical disorders are covered with 118 chapters organized into 8 sections and 2 volumes; each of the eight sections has been critically reviewed by eminent surgeons. Each chapter specifically attempts to draw together all up-to-date relevant information and integrate theory and practice for a comprehensive learning. The concise and practical style is deliberately chosen for easy use. All chapters follow the same format so that there are no inconsistencies in style or content.

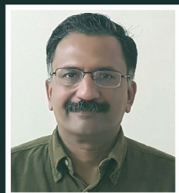
A. Vincent Thamburaj, D.N. B; F.R.C.S.I



A. Vincent Thamburaj, following 5 years with Prof. B. Ramamurthi and about ten years in Ireland and England, has been working as a senior consultant Neurosurgeon at Apollo hospitals, Chennai, India where he trains and guides many neurosurgeons in their thesis in the National Board Neurosurgery programme since 1995. He is also a visiting senior Consultant Neurosurgeon at his parent institute, Voluntary Health Services Hospital and Research Centre, Chennai. He is credited with initiation of ICP monitoring, neurovascular, transphenoidal and transoral procedures in Tamil Nadu.

His live microsurgical and cadaveric workshops were well attended. His online education modules and interactive teaching website, 'Neurosurgery on the web' (thamburaj.in), have been appreciated and emulated globally. His two-volume 'Textbook of Contemporary Neurosurgery' released in 2012 and his recent co-edited monograph on 'Vestibular Schwannomas' were well received. He has delivered guest lectures as a visiting faculty at University Washington and Wayne State University, USA. He is a member of the editorial board, Journal of Neurology & Stroke as well.

Sanjay Behari, MS, MCh, DNB, IFAANS



Sanjay Behari is the Professor of Neurosurgery at Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGI), Lucknow, India. He has also been the Head of the Department of the institute for six years. He has been a visiting professor to the Universities of Geneva, South Carolina, Nagoya, Lisbon, Nagoya and Fukushima. He has been a Sugita and Fujita International fellow, Japan; UICC fellow, Germany Switzerland; Commonwealth Fellow, UK; and Dartmouth-ASSI Fellow, USA. He has also taken 5 named national orations in the country. He has taken several invited lectures, operative and cadaveric demonstrations and webinars and has conducted educative courses, workshops and conferences throughout the country and abroad.

He is credited with a significant increase in the citation index and prestige of the journal during his tenure as the editor of Neurology India. In addition, he is a member of editorial board of 7 national and international journals and reviewer for 21 journals. He has been an MCh and DNB examiner in 23 national and international universities. He has also been a project evaluator for UICC, Geneva, ICMR DST and SERB. He has initiated several biomedical collaborations between IIT and SGPGI. He has been editor of 7 books, 235 peer reviewed publications in national and International Journals, 102 chapters in books. His most recent co-authored book "Practical Neurosurgery" and the two-volume atlas of neurooncological neurosurgical procedures are widely appreciated.

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‘The most valuable asset is not a head full of knowledge. But a heart full of love, with an ear ready to listen and a hand willing to help’ -- Anonymous

In memorium

Prof. Tetsuo Kanno
(1940 – 2021)

The founding father of
Indo-Japan neurosurgical brotherhood.

Credited to be one of the youngest professors of Neurosurgery in Japan, Prof. Kanno started Neurosurgery at the Fujita Health University in 1972. A legendary neurosurgeon, a passionate teacher, a compassionate healer, he was a real a visionary whose dreams and actions have changed the lives of innumerable neurosurgeons in Asia; he almost single-handedly lifted Asian Neurosurgery with his humane hands over several decades of his life. Thanks to him, thousands young neurosurgeons of Asia had an opportunity to broaden their knowledge at more than 10 scientific and training conferences.

Heroes like Prof. Kanno never die.
They may leave their mortal bodies, but continue to live in our hearts.
Their spark lives on, through us and the work we do.

Foreword



Yoko Koto

President, Asian Congress of Neurological Surgeons
Editor-in-chief, Asian Journal of Neurosurgery
Chair, Education and Training Committee WFNS
First Chair, WFNS Women in Neurosurgery
Professor, Dept. Neurosurgery, Fujita Medical University, Japan

I am delighted to write this foreword, not only because Vincent and Sanjay have been my friends for years, and also their commitment to teaching. As you can see in their credentials, they have extensive experience in teaching students.

Books are becoming scarce in this Google days. Paradoxically, our information age has flooded us with an unprecedented volume of medical information; yet clarity and wisdom are still rare. The available books are either exhaustive or too brief. There is a need for a guide with all up-to-date relevant information put together in easily

consumable format, especially for trainees. Vincent and Sanjay, ably assisted by Sachin, have compiled such a guide for a comprehensive learning, focused on a core clinical practice with contributions from international community in a concise and practical style. The wide spectrum of neurosurgical disorders are covered in eight sections; each of the eight sections has been critically reviewed by eminent surgeons; such reviews are not usually found in books.

I do hope that this book will become a primer for trainees and teachers to learn, teach, and practice the art of neurosurgery.

Preface

'Teach the way you'd want to be taught.'

— Unknown

This book is meant to serve as a comprehensive guide for Neurosurgical trainees, young Neurosurgeons and those in allied disciplines who participate in neurological care which can be a daunting experience. It does not attempt to provide everything for a sub specialist.

There are 118 chapters organized into 8 sections in two volumes; each section has been reviewed by eminent neurosurgeons. The first section provides an overview of cerebral homeostasis and recent trends in neurosurgical care. The second chapter is on neurodevelopmental disorders. The third section is on neurotraumas which includes peripheral nerve injuries. Various intracranial infections which form a major brunt of clinical practice in tropical and developing countries have been described in the fourth section. The wide spectrum of cerebrovascular problems are discussed in the fifth section. The sixth section deals with pathology and management of tumors and tumor like lesions that can affect different brain regions.

The increasing interest in degenerative spine in addition to spinal cord lesions are discussed in the next chapter. The last section is devoted to the emerging specialty, restorative neurology.

Most chapters are written by a team of authors for a balanced review of each topic. Each chapter specifically attempts to draw together all up-to-date relevant information and integrate theory and practice for a comprehensive learning. The concise and practical style is deliberately chosen for easy use. All chapters follow the same format so that there are no inconsistencies in style or content.

We wish to thank the authors for generously sharing their knowledge and expertise. We are also grateful to colleagues, especially the section editors, who provided feedback on the outline structure. We thank the team at Chennai Publishing Services who assisted us in producing this book, in particular Mr. N. R. Sankar and his team.

We hope that you, the reader, find this book simple, informative and interesting.

A. Vincent Thamburaj

Sanjay Behari

Comprehensive Neurosurgery

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