Step-By-Step Approach to Endoscopic Cadaveric Dissection

Paranasal Sinuses and the Ventral Skull Base

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I dedicate this book to two distinguished people in my life.  
My student, Shilpee Bhatia Sharma, who has been in my team for almost all the four-handed procedures performed.  
My son, Sathya Narayanan J D, for his ever-growing eagerness to learn that continues to inspire me.
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Foreword

Dr Narayanan Janakiram has introduced his dissection manual, *Step-By-Step Approach to Endoscopic Cadaveric Dissection: Paranasal Sinuses and the Ventral Skull Base*, in the era where endoscope-assisted microsurgery is at the zenith of neurosurgical procedures. With modern camera systems and navigation technology, our perception of anatomical structures has dramatically changed and endoscopic anatomy is now established as a novel entity.

I have known Dr Janakiram as an excellent surgeon and a passionate teacher, delivering his knowledge across continents, and thereby enabling young minds toward endoscope-assisted surgery. This book is a genuine representation of his passion and skills. It encompasses endoscopic approaches to paranasal sinuses, ventral skull base, cranial nerves, and intracranial space. The readers find themselves in an exclusive area at the crossroads of rhinosurgery and neurosurgery, amalgamated into a unique subspecialty known as endoscopic skull base surgery.

This book is well organized into logical sequence of chapters. First, it deals with instrumentation and basic procedures, leading to complex skull base approaches, which are dealt with in later chapters. The simplicity and power of his 15 commandments enables surgeons to deal with intraoperative challenges. I believe these commandments must be habituated right in their learning phase.

Endoscopic dissection of paranasal sinuses always interests neurosurgeons. This also helps in harvesting various intranasal vascularized pedicled flaps for reconstruction. Tips and tricks of endoscopic ventral skull base dissection are best illustrated by two words—wide exposure. Bi-nostril four-handed approach enables bimanual dissection, which is one of the most effective principles of microsurgery. The essentials of endoscopic approaches in sagittal and coronal planes follow next. These are illustrated by graphical images and photographs.

Although I am more familiar with the sagittal approaches and enthusiastic about cavernous sinus dissection, I read infratemporal fossa, transpterygoid, and petrous approaches with utmost interest and endurance. Here, I realized Dr Janakiram’s compassion for propagation of endoscopic skull base surgery.

This book addresses the entire spectrum of expertise—unexperienced and experienced, ENTs and neurosurgeons performing ventral skull base surgery.

Dr Janakiram positions his knowledge and experience from his difficult and extended skull base cases into cadaveric dissection lessons. The most important takeaway message conveyed by this approach is that even experienced surgeons as well as authors cannot dodge the hard work required in the dissection lab.
Endoscope-assisted microsurgery, though minimalistic, is invasive and risky. This book teaches us to follow the principles step-by-step, from paranasal sinuses to skull bases, ascending in complexity from least to the most difficult areas. A must-have book for all skull base surgeons of today and tomorrow.

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Foreword

For years, the teaching and learning in neurosurgery has faced several stumbling blocks with respect to the integration of advancement and improvement of techniques in it with the progress of time. The valuable experience gained by surgeons with years of success, failures, and hard work was not passed on to the next generation of surgeons because of attitude issues, poor teaching material, and an absence of smooth integration of the will to learn and the passion to teach.

In this book, Narayanan Janakiram takes us through his years of hard work, reaching new heights of excellence in endoscopic skull base surgery. His experience has been poured out in the most elegant way possible, something only he can do in his inimitable style.

This book would be a valuable asset for beginners as well as expert neurosurgeons, embarking on the difficult journey of endoscopic skull base surgery. I would like to congratulate Narayanan on this stupendous effort and encourage readers to strive to learn more from this book.

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Preface

As a resident, during my tenure in Madras Medical College, I had the privilege of being mentored by great teachers like Prof G. Gananathan and Prof M. K. Rajashekar, who were a constant source of inspiration to me. My training in endoscopic sinus surgery was undertaken under the able tutelage of renowned surgeons such as Prof D. S. Sethi and Prof P. J. Wormald, who strengthened my foundation in sinus surgery and thus paved the way for me to become a skull base surgeon.

Watching eminent surgeons like Prof Amin Kassam and Prof Ricardo Carrau invoked in me a profound interest in the field of skull base surgery and inspired me to write my first book *Navigation of Sinuses and Ventral Skull Base—Comprehensive Approach to Basic and Advanced Techniques with Radiological Correlations*. An in-depth knowledge in skull base surgery facilitated me to develop new concepts on a very sinister tumor—juvenile nasopharyngeal angiofibroma, which once again gave me the confidence to write another book—*Juvenile Nasopharyngeal Angiofibroma*. The substantial success of these two books motivated me to write this book—*Step-by-Step Approach to Endoscopic Cadaveric Dissection: Paranasal Sinuses and the Ventral Skull Base*.

Skull base surgery is an ever-evolving discipline. Advances in the past two decades have significantly altered the way we approach lesions of the ventral skull base. Cadaveric dissections form an essential element in the training of a skull base surgeon to foster the necessary skills that would enable one to operate with ease and dexterity. I advise all aspiring skull base surgeons (neurosurgeons and ENT surgeons) to perform as many cadaveric dissections as possible in order to shorten the steep learning curve involved in performing complex surgical procedures.

Skull base surgery is an art as well as a science and every young surgeon must attempt to enhance their skills by performing structured and meticulous cadaveric dissections. This endeavor to perfect one’s skills and achieve expertise is a life-long journey and a goal that every skull base surgeon must strive to accomplish.

I conclude with a small piece of advice to youngsters. I request you to respect all your teachers who have taught you not only to perform advanced surgeries, but also those who taught you the basics such as technique of holding an endoscope. Their blessings will make you a complete surgeon and a refined human being.

I hope this book will provide the younger generation of aspiring surgeons with the required knowledge of the basic concepts for performing cadaveric dissections, thus, empowering them to achieve excellence in skull base surgery.

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