The definitive guide to thoracic spine pathologies and state-of-the-art surgical approaches

*Surgery of the Thoracic Spine: Principles and Techniques* by renowned spine surgeons Ali Baaj, Kumar Kakarla, and Han Jo Kim fills a gap in the literature, with content focused solely on pathologies and surgical techniques of the thoracic spine and vertebral column. Starting with a thoughtful discussion on the uniqueness of the thoracic region as it relates to pulmonary function, the richly illustrated textbook covers a full spectrum of topics from biomechanics and anesthetic considerations to neuromonitoring and neuronavigation.

With contributions from a cadre of distinguished experts, the book encompasses pathophysiology, surgical techniques, and reconstructive strategies for common degenerative, congenital, oncologic, and traumatic diseases of the thoracic spine. Dedicated chapters cover treatment options for different types of scoliosis, Scheuermann kyphosis, proximal junctional deformity, and posttraumatic deformity.

**Key Features**

- Treatment of common degenerative conditions including stenosis and disc herniations
- Management of less common inflammatory and infectious spinal diseases such as spondylarthropathies, osteomyelitis, discitis, and fungal and tubercular infections
- Oncologic topics including primary, intradural extramedullary, and intramedullary spinal cord tumors and thoracic spine metastases
- Surgical treatment of pediatric and adult deformities including congenital, idiopathic, and degenerative scoliosis
- Classification of thoracic spinal fractures, discussion of complete and incomplete thoracic spinal cord injuries, posterior and ventral treatment of thoracic spine fractures, and osteoporotic compression fractures
This is an invaluable evaluation and management tool for neurosurgical and orthopaedic residents and practicing spine surgeons who treat patients with common to complex thoracic spinal pathologies.


**COMPETITION**
There is not a contemporary book on thoracic spine surgery, and therefore, there is no direct competition.

**CONTENTS**

**Part I Introduction**
1 Pulmonary and Chest Wall Physiology
2 Biomechanics of the Thoracic Spinal Column
3 Anesthetic Considerations for Surgery of the Thoracic Spine
4 Clinical Presentation of Thoracic Spinal Compression
5 Nonoperative Neurological Diseases of the Thoracic Spinal Cord

**Part II Deformity**
6 Surgical Management of Congenital Scoliosis
7 Neuromuscular Scoliosis
8 Adolescent Idiopathic Scoliosis
9 Scheuermann's Kyphosis
10 Proximal Junctional Deformity
11 Posttraumatic Deformity

**Part III Degenerative Disease**
12 Thoracic Spinal Stenosis
13 Paracentral Disc Herniations of the Thoracic Spine
14 Midline Disc Herniations of the Thoracic Spine
15 Spondyloarthropathies.

**Part IV Infection**
16 Epidural and Soft-Tissue Infections
17 Thoracic Osteomyelitis and Discitis
18 Fungal and Tubercular Infections of the Thoracic Spine

**Part V Tumor and Vascular**
19 Primary Tumors of the Thoracic Spinal Column
20 Metastatic Disease of the Thoracic Spinal Column
21 Intradural Extramedullary Tumors
22 Intramedullary Spinal Cord Tumors
23 Surgical Management of Thoracic Spinal Arteriovenous Malformations

**Part VI Trauma**
24 Classifications of Thoracic Spinal Fractures
25 Complete and Incomplete Thoracic Spinal Cord Injuries
26 Posterior Approaches for Thoracic Spine Fractures
27 Ventral Approaches to the Thoracic Spine for Trauma
28 Osteoporotic Compression Fractures

**Part VII Further Topics**
29 Idiopathic Spinal Cord Herniation
30 Intraoperative Neuromonitoring During Thoracic Spine and Spinal Cord Surgery
31 Neuronavigation for Complex Thoracic Spine Surgery