



# Lumbar Spine Surgery

**Joseph C. Cauthen**

A red circular graphic with a gradient, appearing as a semi-circle or a partial circle, located to the right of the author's name.

## **Lumbar Spine Surgery:**

Spine Surgery Basics Vikas V. Patel, Alpesh Patel, James S. Harrop, Evalina Burger, 2013-09-11 Spine surgery has increasingly become a surgical field of its own with a distinct body of knowledge. This easy-to-use book, written by acknowledged experts, is designed to meet the practical needs of the novice and the busy resident by providing essential information on spine pathology, diagnostic evaluation, surgical procedures, and other treatments. After an opening general section, degenerative spinal disease, pediatric spine conditions, spine trauma, spine tumors, infections, inflammatory disorders, and metabolic conditions are all discussed in more depth. Alongside description and evaluation of surgical options, important background information is included on pathology, presentation, diagnosis, and nonsurgical treatments. Potential complications of surgery are also carefully considered. **Minimally Invasive** Spine Surgery Basics will be an invaluable aid for all who are embarking on a career in spinal surgery or require a ready reference that can be consulted during everyday practice.

**Surgery of the Lumbar Spine** Pier Paolo Maria Menchetti, 2013-10-01 Minimally invasive procedures are increasingly utilized and are replacing open surgery to reduce scarring and pain, enhance patient recovery, and minimize cost. This guide provides step-by-step guidance, expert instruction, and detailed illustration of the most recent minimally invasive orthopedic spine procedures. With a variety of chapters covering critical developments in the field, including the utilization of biologic materials, image-guided surgery, and bone fusion, this guide delves into discussions of indications, methods for preoperative planning, complication avoidance strategies, and patient outcomes.

Lumbar Spine Access Surgery Joseph R. O'Brien, Jeffrey B. Weinreb, Joseph C. Babrowicz, 2024-02-20 Quality surgeons must have all the tips, tricks, and tools to provide their patients with the best care possible. Anterior and lateral approaches have revolutionized spine surgery, but even so, many surgeons have not learned the procedures and treatment involved, and the ones who have demonstrate a very difficult learning curve. This can be partially attributed to a lack of instructional literature, and this book aims to fill this gap so that incoming as well as veteran surgeons can add the anterior and lateral approaches to their arsenal. This text guides the surgeon through the full arc of treatment, from deciding which approach to use to treating the patient postoperatively. Specifically, the reader will gain comprehensive knowledge on how to perform each access procedure, how to care for and treat the patient at every stage, and the best ways to handle an array of complications they may face. Seven sections present everything the surgeon needs to know: history and rationale, preoperative and intraoperative care, surgical techniques, intraoperative complications, postoperative care, and a final section covering additional considerations for revision surgery, biological treatments, and approaches for both outpatient and obese patients. Written by experts in the field, **Lumbar Spine Access Surgery** will be a valuable reference for spine, orthopedic, and vascular surgeons looking to expand their skill set.

**Revision Lumbar Spine Surgery E-Book** Robert F. Heary, 2021-03-03 Offering in-depth coverage of an often neglected topic, **Revision Lumbar Spine Surgery** identifies clinical problems and discusses recent major advances in this challenging area. Dr. Robert F. Heary and a

team of international experts share their knowledge and experience with even the most difficult lumbar cases helping you provide optimal outcomes for your patients You ll find authoritative guidance on indications diagnosis approaches and follow up with a focus on the significant advances that have occurred over the past two decades in this fast changing field Identifies the clinical problems related to unsuccessful back spine surgery as well as indications diagnosis and new treatment options and advances in this complex area Provides in depth information on the multiple options that exist for most clinical situations anterior posterior lateral and combined anterior and posterior approaches Covers methods of fixation the use of interbody grafting and surgical planning related to scar tissues bleeding and spinal fluid leaks Discusses critical follow up topics such as key clinical procedures radiography patient reported outcomes and pain management Includes timely chapters on robotics bone density issues medical fitness concerns instrumentation options imaging considerations and much more

**Outpatient Spinal Surgery** Mick Perez-Cruet, Richard Glenn Fessler, 2001-07-02 There s no end in sight to the increasing demand for minimally invasive spinal treatment Surgeons love the advancing techniques and improved instrumentation with which they can address a widening range of indications Informed patients actively seek the benefits of reduced scarring and a faster return to work Health maintenance organizations favor ambulatory surgery for its cost containment advantage Outpatient Spinal Surgery is an illustrated reference to the operative techniques of surgery from the cervical to the lumbar spine that can be performed on an ambulatory basis It is also a detailed guide to the bottom line business aspects of establishing managing and marketing a successful outpatient spinal center that consistently delivers quality outcomes Operative techniques many described by the leading experts who perfected them are presented with straightforward instructions to facilitate rapid learning Each is accompanied by detailed illustrations and a step by step diagram The authors note anomalies which may be encountered and how they are best managed and comment on surgical equipment and instrumentation The logistics and economics of establishing an ambulatory clinic are examined as well Design and staffing record keeping and outcomes analysis relationships with insurers regulatory and licensing considerations competitive pricing and advertising the business side is covered extensively Outpatient Spinal Surgery is an essential single volume reference that provides both the surgical skills and the business essentials required for a thriving ambulatory spine center

*Handbook of Spine Surgery* Ali A Baaj, Praveen V. Mummaneni, Juan S. Uribe, Alexander R. Vaccaro, Mark S. Greenberg, 2015-12-07 An updated edition of the most comprehensive guide to spine surgery Handbook of Spine Surgery Second Edition is a completely updated and comprehensive reference that distills the basic principles of contemporary spine surgery Its coverage of both principles and techniques makes it an excellent refresher before surgery or a valuable daily companion for residents and surgeons caring for patients with spinal disorders Key Features of the Second Edition New chapters on adult degenerative deformity pediatric scoliosis and radiographic principles of deformity Expanded spinal trauma section now includes separate chapters on cervical thoracolumbar and sacropelvic injuries Common clinical questions with answers at the end of each chapter highlight topics

frequently encountered in the operating room and on board exams Easy to read bulleted format The second edition of this handbook is the go to guide for all those involved in spine surgery *Lumbar Spine Surgery* Joseph C. Cauthen,1988

**Minimally Invasive Spine Surgery** Luis Manuel Tumialan,2020-10-01 Unique resource provides spine surgeons with the right tools and mindset to perform minimally invasive surgery *Minimally Invasive Spine Surgery A Primer* by Luis Manuel Tumialan is the ideal introduction to minimally invasive spine approaches especially for neurosurgery and orthopedic residents fellows and spine surgeons who want to incorporate minimally invasive approaches into their practice The Primer offers a treasure trove of 3D illustrations and animations that virtually brings the aspiring minimally invasive spine surgeon into the operating room alongside their professor The text starts with a discussion of open spine surgery versus minimally invasive procedures and the optimal mindset required to convert from one to the other The book is divided into lumbar cervical and thoracic spine sections and a fourth section dedicated to the fundamentals of fluoroscopy and radiation exposure The text begins with an overview history and evolution of each procedure followed by a discussion of the anatomical basis for using a minimally invasive approach Each anatomical section starts with the least complicated surgeries thereby laying the foundation for more complex procedures discussed in subsequent chapters The third section focuses on thoracic decompression nerve sheath tumors in the lumbar and thoracic spine and management of metastatic disease and intradural extramedullary lesions Key Features Single authored text provides uniform readability and philosophy cover to cover Lumbar approaches include microdiscectomy laminectomy transforaminal interbody fusions and the transpsoas approach Cervical procedures encompass posterior foraminotomy laminectomy and anterior discectomy Superb illustrations high fidelity anatomical animations based on computer modeling and procedural videos enhance understanding of minimally invasive spine principles This unique single author Primer is a must have resource for early career spine surgeons who wish to learn minimally invasive principles as well as veteran surgeons who have a desire to incorporate minimally invasive spine surgery into clinical practice *Minimally Invasive Spine Surgery* Chadi Tannoury,2017-04-24 The field of spine surgery is in a state of flux with minimally invasive and open surgical procedures vying for dominance A new volume in the Minimally Invasive Orthopaedic Surgery series *Minimally Invasive Spine Surgery* weighs the pros and cons of today's open versus minimally invasive techniques allowing you to choose the approaches that will best meet your patients needs In each chapter accomplished experts describe the advantages indications setup technical aspects and problem areas associated with a given minimally invasive procedure including critiques from surgeons who favor a standard open approach to give you a balanced objective foundation for surgical decision making *Lateral Access Minimally Invasive Spine Surgery* Michael Y. Wang,Andrew A. Sama,Juan S. Uribe,2016-11-26 This well illustrated textbook is the first comprehensive and authoritative source of information on minimally invasive lateral access spine surgery It covers all aspects of the subject including patient selection approach and monitoring techniques soft tissue management application in a variety of pathologies technical

nuances and the prevention and management of complications In addition current controversies in the field are discussed and the biomechanics of lateral spinal reconstruction the physiologic benefits and cost implications are explained As use of the lateral approach in spinal surgery has become more popular so its diversity and complexity have increased Nevertheless publications devoted entirely to the technique are lacking and Lateral Access Minimally Invasive Spine Surgery is designed to fill this vacuum Written by the world s experts on the topic it will be an excellent resource for both beginning and experienced surgeons

**Video Atlas of Spine Surgery** Howard S. An, Philip K. Louie, Bryce Basques, Gregory Lopez, 2020-05-30 A high yield and comprehensive text and video resource for managing commonly encountered spinal conditions Spine surgery has experienced several paradigm shifts during the past few decades with highly complex techniques introduced at an astoundingly rapid pace In order for new generations of spine surgeons to stay current and thrive in this innovative era of spine surgery access to diverse multimedia learning tools is imperative Video Atlas of Spine Surgery by renowned spine surgeon and educator Howard An and Rush University Medical Center colleagues Philip Louie Bryce Basques and Gregory Lopez is a cutting edge resource for non operative and operative management of a diverse spectrum of cervical thoracic and lumbar spine conditions Consisting of 19 chapters the text is streamlined to facilitate learning the most important steps for each procedure The book begins with discussion of physical exam maneuvers used to accurately diagnose specific spinal pathologies Subsequent chapters detail extensive spine surgery techniques for managing degenerative cervical and lumbar conditions The remaining chapters cover spinal cord cervical and thoracolumbar injuries idiopathic degenerative and early onset scoliosis kyphosis spondylolisthesis spinal infections and inflammatory disorders and thoracic disc disorders Key Features Concise bulleted text and consistent chapter outlines feature epidemiology and prevalence pathogenesis clinical presentation image findings classification conservative and surgical management techniques postoperative care and more A myriad of meticulous diagrams and illustrations spinal imaging and photographs and 50 high quality spine surgery videos maximize learning Technical pearls case examples and board style orthopaedic surgery questions at the end of each section optimize comprehension and retention of information This remarkable resource is a must have for orthopaedic and neurosurgery residents and fellows as well as practicing spine surgeons

**Benzel's Spine Surgery E-Book** Michael P Steinmetz, Edward C. Benzel, 2016-06-29 In the latest edition of Benzel s Spine Surgery renowned neurosurgery authority Dr Edward C Benzel along with new editor Dr Michael P Steinmetz deliver the most up to date information available on every aspect of spine surgery Improved visuals and over 100 brand new illustrations enhance your understanding of the text while 26 new chapters cover today s hot topics in the field A must have resource for every neurosurgeon and orthopedic spine surgeon Benzel s Spine Surgery provides the expert step by step guidance required for successful surgical outcomes Glean essential up to date information in one comprehensive reference that explores the full spectrum of techniques used in spine surgery Covers today s hot topics in spine surgery such as pelvic parameters in

planning for lumbar fusion minimally invasive strategies for the treatment of tumors and trauma of the spine and biologics and stem cells A total of 18 intraoperative videos allow you to hone your skills and techniques New editor Michael P Steinmetz brings fresh insights and improvements to the text Features the addition of 26 chapters including Biologics in Spine Fusion Surgery Endoscopic and Transnasal Approaches to the Craniocervical Junction Cellular Injection Techniques for Discogenic Pain Minimally Invasive Techniques for Thoracolumbar Deformity Spinal Cord Herniation and Spontaneous Cerebrospinal Fluid Leak MIS Versus Open Spine Surgery Extensive revisions to many of the existing chapters present all of the most up to date information available on every aspect of spine surgery Improved visuals and over 100 brand new illustrations enhance learning and retention

**Do You Really Need Spine Surgery?** David Hanscom MD, 2019-10-29  
Deciding whether to undergo spine surgery is one of the most important choices you will ever make Author and spine surgeon Dr David Hanscom has observed that in this era of corporate medicine surgical decisions are often made quickly without a complete evaluation or attempt at non surgical rehabilitation before proceeding The result The majority of spine operations are unnecessary and many surgeries are performed on spines with normal age related conditions When performed for a specific anatomical problem with matching symptoms the outcomes are consistently satisfying Conversely when surgery is conducted to address pain without a clear source the consequences can be unpredictable with a high percent of patients faring poorly or becoming much worse catastrophic A failed spinal surgery can virtually destroy one s life Additionally when a patient s nervous system is fired up from stress results are often poor A common cry from patients is If I only knew how badly this could turn out I would have never had this surgery The depth of frustration at making the wrong decision is beyond words because there is no turning back If you are facing a decision about spine surgery **Do You Really Need Spine Surgery** provides you and your medical providers important information to help make the best choice All relevant variables are addressed and organized into a treatment grid With this grid you and your health care team can determine the most effective approach and course of action with full consideration to the potential downside of a failed spinal surgery **Do You Really Need Spine Surgery** gives back control of the surgical decision to you the patient Take it

*State of the Art for Minimally Invasive Spine Surgery* A. Dezawa, P.-Q. Chen, J.-Y. Chung, 2006-03-20 The second congress of the Pacific Asian Society of Minimally Invasive Spine Surgery PASMISS held in Phuket Thailand August 5 6 2002 was highly successful Dr Akira Dezawa the president had worked hard in organizing the congress which was well attended All scientific papers presented were of the highest standard and were worthy of publication in book form This scientific meeting brought to light the practice of this modern surgical technique as it is being performed by spine surgeons in the Asia Pacific region Dr Dezawa has made a great effort to collect the papers from the congress and to have them edited and published as a text that covers all aspects of the minimally invasive spine surgical approach Minimally invasive spinal surgery will be a highlight of operative approaches in the twenty first century and already has been popularized worldwide This procedure will provide surgical options that address

several pathological conditions in the spinal column without producing the types of morbidity commonly seen in open surgical procedures The contents of this book provide highly relevant and detailed information I certainly believe that it will be a great benefit to all orthopedic surgeons who are interested in performing minimally invasive spine surgery Charoen Chotigavanich M D Chairman Spinal Section The Royal College of Orthopedic Surgeons of Thailand V Preface Recent decades have been characterized by revolutionary changes in spinal surgery Concurrent progress in implant technology and functional endoscopes and the improvement of less invasive surgical techniques has opened a new dimension for spine surgery

*Minimally Invasive Spine Surgery* H. Michael Mayer, 2006-01-26 Don't miss it The second completely revised and expanded edition of the successful surgical manual on minimally invasive spine surgery includes 51 chapters including more than 20 new chapters covering all current minimally invasive techniques in spine surgery A complete survey of all microsurgical and endoscopic techniques with a special focus on semi invasive injection techniques for diagnostic and therapeutic purposes in low back pain is given The clear chapter structure with terminology history surgical principles advantages disadvantages indications access principles complications and results facilitates navigation through the manual Topics include the principles of microsurgical and endoscopic treatment spinal navigation and computer assisted surgery minimally invasive reconstruction fusion dynamic stabilization in fractures degenerative disc disease spinal stenosis low back pain and deformities The didactic presentation of surgical steps makes the reader familiar with all types of new minimally invasive techniques in clinical use or still in ongoing clinical trials such as minimally invasive spine arthroplasty *The Resident's Guide to Spine Surgery* Joseph R. O'Brien, S. Bobby Kalantar, Doniel Drazin, Faheem A. Sandhu, 2019-11-23 With an emphasis on set up and execution and lessons learned from expert practitioners this concise practical guide for residents and fellows presents the essentials for both common and complex spine surgery Proceeding anatomically from the cervical to the sacroiliac and including chapters on spinal tumors infection and revision surgery nearly 40 different procedures are highlighted from corpectomy arthroplasty and laminectomy to percutaneous screws decompression and fusion Chapters include all the information a resident will need to know indications and contraindications imaging and diagnosis OR set up and instrumentation selection the specific operative technique post operative protocols and clinical pearls and pitfalls Radiographs and full color intraoperative photographs accompany each procedure Whether suturing dura or performing a lateral interbody fusion spinal surgery is a technical pursuit and having a firm grasp of the details can ultimately determine the procedure's success Written and edited by veterans in orthopedic surgery and neurosurgery *The Resident's Guide to Spine Surgery* is just the detailed user friendly resource for up and coming clinicians looking to develop and expand their surgical expertise *Minimally Invasive Spinal Deformity Surgery* Michael Y. Wang, Yi Lu, D. Greg Anderson, Praveen V. Mummaneni, 2014-01-17 Contemporary spinal surgeons whether orthopedic or neurosurgeons are increasingly recognizing minimally invasive spine surgery MISS as a desirable option to manage advanced degenerative diseases MISS techniques

minimize blood loss surgical site pain and speed recovery Thus the marriage of MISS with adult spinal deformity was a natural one Currently the techniques technologies and education of surgeons have finally reached a point where MISS deformity surgeries are becoming commonplace Nevertheless the field is young enough that no comprehensive texts have addressed the unique challenges faced by surgeons exploring this evolving field This book will fill the gap

**Lumbar Discectomy and Laminectomy** Robert G. Watkins, John S. Collis, 1987 *Complications of Spine Surgery* Howard S. An, Louis G. J. Denis, 2006 Written by internationally recognized experts this book is a comprehensive practical guide to prevention recognition and management of complications in spine surgery Sections cover the cervical spine and the thoracolumbar lumbosacral spine and discuss the full range of complications that may be encountered including those associated with the newest technologies procedures and instrumentation Each chapter focuses on a specific type of problem and presents how to strategies for avoiding and managing the problem in specific surgical procedures Of special note are the detailed discussions of complications related to instrumentation Each chapter includes extensive up to date references More than 150 illustrations complement the text

**Minimally Invasive Spine Surgery** Luis Manuel Tumialan, 2020-10-01 Unique resource provides spine surgeons with the right tools and mindset to perform minimally invasive surgery Minimally Invasive Spine Surgery A Primer by Luis Manuel Tumialan is the ideal introduction to minimally invasive spine approaches especially for neurosurgery and orthopedic residents fellows and spine surgeons who want to incorporate minimally invasive approaches into their practice The Primer offers a treasure trove of 3D illustrations and animations that virtually brings the aspiring minimally invasive spine surgeon into the operating room alongside their professor The text starts with a discussion of open spine surgery versus minimally invasive procedures and the optimal mindset required to convert from one to the other The book is divided into lumbar cervical and thoracic spine sections and a fourth section dedicated to the fundamentals of fluoroscopy and radiation exposure The text begins with an overview history and evolution of each procedure followed by a discussion of the anatomical basis for using a minimally invasive approach Each anatomical section starts with the least complicated surgeries thereby laying the foundation for more complex procedures discussed in subsequent chapters The third section focuses on thoracic decompression nerve sheath tumors in the lumbar and thoracic spine and management of metastatic disease and intradural extramedullary lesions Key Features Single authored text provides uniform readability and philosophy cover to cover Lumbar approaches include microdiscectomy laminectomy transforaminal interbody fusions and the transposas approach Cervical procedures encompass posterior foraminotomy laminectomy and anterior discectomy Superb illustrations high fidelity anatomical animations based on computer modeling and procedural videos enhance understanding of minimally invasive spine principles This unique single author Primer is a must have resource for early career spine surgeons who wish to learn minimally invasive principles as well as veteran surgeons who have a desire to incorporate minimally invasive spine surgery into clinical practice

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