

New Technologies In Spine Surgery An Issue Of Neurosurgery Clinics Of North America E (The Clinics: Surgery 31)

New Technologies in Spine Surgery

An Issue of Neurosurgery Clinics of North America

Guest Editors:

- Jason M. Kurland, MD
- Edward C. Benzel, MD

Contents:

- **Imaging Techniques for Spine Surgery**
 - Magnetic Resonance Imaging of the Spine
 - Computed Tomography of the Spine
 - Fluoroscopy in Spine Surgery
 - Ultrasound in Spine Surgery
- **Minimally Invasive Spine Surgery**
 - Microdiscectomy
 - Endoscopic Spine Surgery

- Laser Spine Surgery
- Percutaneous Spine Surgery

- **Robotics in Spine Surgery**



New Technologies in Spine Surgery, An Issue of Neurosurgery Clinics of North America E-Book (The Clinics: Surgery 31)

★★★★★ 5 out of 5

Language : English
 File size : 80115 KB
 Text-to-Speech : Enabled
 Screen Reader : Supported
 Enhanced typesetting : Enabled
 Print length : 240 pages



- Robotic Spine Surgery Systems
- Applications of Robotics in Spine Surgery
- Benefits and Risks of Robotic Spine Surgery

- **Artificial Intelligence in Spine Surgery**

- Artificial Intelligence for Spine Imaging
- Artificial Intelligence for Spine Diagnosis
- Artificial Intelligence for Spine Treatment Planning
- Artificial Intelligence for Spine Surgery Navigation

- **3D Printing in Spine Surgery**

- 3D Printing for Spine Implants
- 3D Printing for Spine Models
- 3D Printing for Spine Research
- **Virtual Reality and Augmented Reality in Spine Surgery**
 - Virtual Reality for Spine Surgery Planning
 - Virtual Reality for Spine Surgery Training
 - Augmented Reality for Spine Surgery Navigation

Overview

This issue of Neurosurgery Clinics, guest edited by Drs. Jason M. Kurland and Edward C. Benzel, provides an update on the latest surgical techniques for treating spinal disorders. Articles cover current imaging techniques, minimally invasive surgery, and the use of robotics, as well as the latest advancements in spinal reconstruction, spinal fusion, and biologics.

Key Points

- **Minimally invasive spine surgery** techniques are becoming increasingly popular due to their reduced invasiveness, shorter recovery times, and better cosmetic outcomes.
- **Robotics** is playing a growing role in spine surgery, offering greater precision and accuracy than traditional surgical techniques.
- **Artificial intelligence** is being used to develop new imaging techniques, diagnostic tools, and treatment planning algorithms for spine surgery.

- **3D printing** is being used to create patient-specific implants and models for spine surgery planning and training.
- **Virtual reality** and **augmented reality** are being used to develop new training tools and navigation systems for spine surgery.

Target Audience

This issue is intended for neurosurgeons, orthopedic surgeons, and other healthcare professionals who treat patients with spinal disorders.

Continuing Medical Education

This issue is accredited for **12 CME credits**. To receive credit, please complete the online CME test at the end of the issue.

About the Contributors

The contributors to this issue are all experts in their respective fields. They have been carefully selected to provide a comprehensive overview of the latest advances in spine surgery.

Acknowledgements

The editors would like to thank the contributors for their valuable contributions to this issue. They would also like to thank the staff at Neurosurgery Clinics for their assistance in putting this issue together.



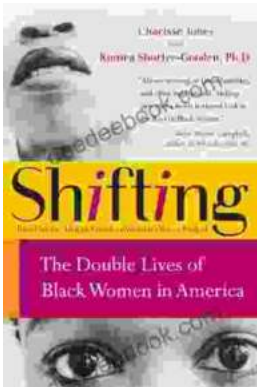
New Technologies in Spine Surgery, An Issue of Neurosurgery Clinics of North America E-Book (The Clinics: Surgery 31)

★★★★★ 5 out of 5

Language : English

File size : 80115 KB

Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting : Enabled
Print length : 240 pages



The Double Lives of Black Women in America: Navigating the Intersections of Race, Gender, and Class

Black women in America lead complex and multifaceted lives, juggling multiple roles and identities while navigating the often-intersecting challenges...



Banging My Billionaire Boss: A Love Story for the Ages (or at Least the Next Few Hours)

Chapter 1: The Interview I was nervous. Really nervous. I mean, I was about to interview for my dream job, the one that I had been working towards for years. I had...