

1. Anatomy and Physiology/Biology of Bone
2. The Role of Osteoporosis and Bone Diseases in Revision Spine Surgery
3. Medical Fitness Evaluation
4. Indications
5. Imaging Considerations (Magnetic Resonance, Computed Tomography, Myelography, Plain)
6. Dural Scarring and Repair Issues
7. Decompression
8. Disc Herniation (Primary, Recurrent, Residual)
9. Instrumentation Options
10. Autograft/Allograft/Cage/Bone Morphogenetic Protein
11. Minimally Invasive Surgery and Navigation
12. Anterior Lumbar Fusion
13. Revision Transforaminal Lumbar Interbody Fusion
14. Lateral Lumbar Interbody Fusion
15. Anterior-Posterior Surgeries
16. Unilateral Versus Bilateral Strut Placement in Revision Spine Surgery
17. Robotics for Revision Spine Surgery
18. Pedicle Subtraction Osteotomy
19. Vertebral Column Resection
20. Revision Lumbar Deformity Surgery
21. Postoperative Considerations
22. Adjacent Segment Disease After Fusion
23. Pseudarthrosis/Nonunion
24. Iatrogenic Spinal Instability: Causes, Evaluation, Treatment, and Prevention
25. Advances in Spinal Cord Stimulation