Examines new non-fusion technologies for treating spinal degenerative conditions while preserving motion.

Major sections describe various surgical techniques and devices for nucleus pulposus replacement and total lumbar and cervical disc arthroplasty, as well as other stabilization techniques. Coverage includes indications and contraindications, surgical approaches, and the latest clinical trial results. Several chapters discuss nonsurgical and minimally invasive treatments, including gene therapy, nucleus pulposus regeneration, and IDET. Other chapters address economic and ethical issues, including use of registries, medical device regulation, and outcome and cost of lumbar disc replacement versus lumbar fusion.