The clinical, social, and economic implications of back pain are monumental. In the United States, health care expenditure related to back pain in 2005 was $86 billion, a figure similar to what the country spent on the treatment of diabetes. Forty million Americans with spinal or back pain will consult a doctor annually. In the United Kingdom, 13% of the working population will miss work because of back pain for a month or more. In terms of economy (national and individual), of employees who are off work for 6 months, only half return to work; of those off for 12 months, a quarter return. Two years of incapacitating back pain and the worker may never return to work.

There is thus an understandable pressure on the physician to “cure” the problem, an unachievable goal for many patients from the start considering the results reported in the literature and the comorbidities of pain in other sites and obesity in most back pain sufferers. The diametric treatment options of operation and no surgery are due to the less than universal success of the myriad of interventions and also the wide variety of somatic and psychological factors that can evince back pain. It requires a detailed clinical history to identify mechanical back pain; unfortunately, too many decisions to operate are based on magnetic resonance imaging, and the “black disc” is too often the scapegoat. In the United States, there is a 15-fold variation in the incidence of lumbar disc surgery across the country, and an industry has developed around failed back and revision surgery.

Controlled clinical trials of surgery have not given the hoped-for advantage of surgery versus a nonoperative approach for acute sciatica in The Netherlands or fusion for chronic back pain in the United Kingdom. The multicenter SPORT trial in the United States, which appeared to favor surgery, was confounded by the fact that the actual cost of the operation, implant, and reimbursement varied in the 13 trial centers, which interfered with the outcome calculations.

As health dollars become scarcer and a once-adoring public becomes more questioning, it is essential that physicians, surgeons, and health care workers understand much more deeply than before the causes, pathomechanics, and likely national history of a condition that causes much misery but very little mortality.

In this text, Frank Phillips and Carl Lauryssen—themselves expert clinicians, surgeons, and academics—have brought together a group of experts to look at the lumbar intervertebral disc, with considerable success. Natural aging and pathological changes are carefully presented in different chapters. The etiology of pain associated with acute disc injury as well as with a chronic degenerative condition is presented. The editors face up to the still-large gaps in our understanding of the condition and concede that “the mechanisms of discogenic pain is not well understood.” But their authors provide the latest in the biology of degeneration and pain generation to stimulate the inquiring reader. In addition, the role of presurgical psychological screening, the importance of education, and the value of back schools and cognitive therapy are addressed. Conventional microsurgical techniques are described, as are new approaches, such as annular repair and barrier techniques and developments in arthroplasty. All the chapters are well researched and extensively referenced to allow the reader to pursue further individual lines of investigation.

The Lumbar Intervertebral Disc is important reading for those who wish to know the current thinking on this most difficult topic. I commend it, wholeheartedly.

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Diseases of the intervertebral disc and associated degenerative disorders of the lumbar spine are a major focus of contemporary spinal care. These conditions are formidable clinical problems as well as a leading cause of suffering and disability, resulting in substantial health care costs. Disc degeneration may itself cause symptoms but is also an early event in the spinal degenerative cascade, ultimately leading to a variety of pathologies of the spine. This book, *The Lumbar Intervertebral Disc*, is devoted to the understanding and treatment of disorders of the disc. The editors’ vision was to provide the reader with a text that comprehensively explores the latest knowledge pertaining to the lumbar intervertebral disc, with detailed information regarding the diagnosis and treatment of disc-related conditions, as well as the basic science of the disc, including anatomy, biology, pathophysiology, and biomechanics. We are very fortunate to have leaders in the field contributing chapters to this book.

In recent years, unprecedented advances in understanding of the biology and biomechanics of the disc in health and disease have led to developments in novel nonsurgical and surgical approaches to treatment of disc-related pain. Emerging over the past decade are less-invasive surgical strategies as well as motion-sparing surgical alternatives, and *The Lumbar Intervertebral Disc* explores these and other scientific frontiers relating to the disc, covering the breadth of pathologic syndromes and treatment options for the lumbar disc. Chapters are arranged logically, covering the herniated disc as well as degenerative disc disease. In each area, we describe the anatomy and biology, biomechanics and kinematics, pathophysiology and natural history, diagnostic workup, and surgical and nonoperative management of the condition. There is also focus on the patient as a whole, and the psychological aspects of disc disease are covered. We hope that the accurate surgical drawings will be helpful for surgical preparation.

Expert contributors in the field share their knowledge and expertise covering a wide variety of topics, and learning gems are numerous. Although specially intended for orthopedic and neurologic spinal surgeons (and advanced-level trainees including spine fellows and residents), the comprehensive and inclusive nature of *The Lumbar Intervertebral Disc* makes it of interest to pain specialists, scientists, physical therapists, chiropractors, and physiatrists — indeed, of anyone fascinated with the intricacies of the disc.

Frank M. Phillips
Carl Lauryssen