

## Preface

Low back pain is one of the most common conditions encountered in clinical practice; however, its definition itself is subject to debate and precise knowledge about it is conflicting. It can be attributed to a great number of different origins although, often, the true cause of nociception cannot be precisely defined. Furthermore, psychosocial variables have an important influence on the reporting back pain symptoms. Nevertheless, low back pain and the pathologies believed to be its cause are the main indication for spine surgery in most area of the world while true evidence about indications remains elusive and there is much discussion about the very different techniques used.

The goal of this book is to shed some light on this complex subject. The indispensable bases of biology and biomechanics of spinal structures are covered as well as the important psychosocial determinants associated with back complaints. Diagnosis is now enhanced by new magnetic resonance techniques described thoroughly.

Conservative treatment is still the base of low back pain handling, and natural history of the condition as well as the main conservative therapeutic options are described in detail. Medications, rehabilitation, back schools, manipulative therapies, and orthoses are the subject of fully documented chapters.

Surgical techniques abound for the treatment of lumbar spine disorders and this book tries to clarify their indications and results. For many years fusion was the most used technique and became the “de facto” gold standard. The role of pelvic girdle pain and facet syndrome is subject to debate and the possible surgical treatment is discussed in those conditions. Chapters will cover different technique as well as the possible drawbacks like blood loss and adjacent level degeneration. The latter has led to the development of “nonfusion” technologies like artificial disks, semirigid fixation techniques, or interspinous implants. Indications, counter indications, techniques, and complications of those different techniques are presented and lead to discussion about what evidence we have for their effectiveness.

Outcome assessment is paramount to finding evidence for treatments of low back pain. The principles of outcome assessment in back pain as well as the review of actual available evidence ends the book.

This book is intended for clinicians as well as researchers in many fields of spinal disorders. It is of use to orthopedic and neurosurgeons, rheumatologists, neurologists, physiatrists, physical therapists, as well as psychologists and social security and insurance specialists.

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