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TABLE OF CONTENTS

Foreword	5
About the Author	7
Acknowledgments	7
Introduction.....	9
Chapter 1: Back Pain Is Very Common, and Here’s Why	11
<i>How Our Genes Lead to Back Pain • How Spinal Discs Work • Why Disc Degeneration Causes Pain</i>	
Chapter 2: Which of the 7 Types of Back Pain Do You Have?.....	20
<i>Take This Questionnaire to Find Out What Type of Back Pain You Have</i>	
Chapter 3: Acute Severe Back Pain: What Could It Be, and What Should You Do?.....	28
<i>How to Know If You Need Immediate Help • Some Urgent Conditions That Require Emergency Care</i>	
Chapter 4: Choosing The Right Kind of Doctor	35
<i>Emergency Physicians • Primary Care Physicians • Psychiatrists • Chiropractors • Spinal Surgeons • Neurosurgeons vs. Orthopaedic Surgeons • Other Specialists • Massage Therapists, Acupuncturists, and Personal Trainers</i>	
Chapter 5: What You Should Know – And Do – If You Have a Herniated (“Slipped”) Disk.....	43
<i>How You Know If It’s a Herniated Disc • Do You Really Need Surgery? • MRI Scans, CAT Scans, and Myelograms • Surviving an MRI Scan When You Have Claustrophobia • What Does It Mean to “Walk It Off?” • Epidurals • Types of Surgery and Risks</i>	
Chapter 6: Spinal Stenosis: What Is It and What Can You Do About It?.....	71

TABLE OF CONTENTS

How Spinal Stenosis Causes Pain • When to Suspect Spinal Stenosis • Causes and Symptoms • When Surgery Is Necessary, and How It Is Performed

Chapter 7: What To Do If Your Pain is From an Unstable or Deformed Spine86

Spondylolisthesis: The Most Common Spinal Deformity • What Does ‘Unstable Spine’ Mean? • Scoliosis • Osteoporosis • What Is a Spinal Fusion and How Is It Done?

Chapter 8: Chronic Back Pain: What To Do When the Pain Just Won’t Go Away99

Determining the Cause • Arthritis • Degenerative Disc Disease • How Depression and Stress Affect Back Pain • How to Take Control of the Pain

Chapter 9: A Plethora of Back-Pain Care: Pills, Exercise, Injections, and Alternative Treatments107

Anti-Inflammatories, Narcotics, and Muscle Relaxants • Chiropractic • Traction • Types of Exercise • Stretching • Physical Therapist vs. Trainer • Pain Management • Minimally Invasive Treatments • Destroying Sensory Nerves to Treat Pain • Back Braces • ‘Touch’ Therapy

Chapter 10: What You Can Do to Avoid ‘Failed Back Syndrome’131

Don’t Have Back Surgery If You’re Unprepared • Spinal Stenosis and Spinal Instability As Causes • Missed Diagnosis or Multiple Sources of Pain • Adjacent Segment Failure • Unmet Expectations of Surgery

Chapter 11: How to Prevent Back Pain From Ruling Your Life137

Everyday Things You Should Avoid • Exercise: The Best Preventive Medicine • Why Quitting Smoking Is So Important • How to Avoid Pain From Spinal Deformity and Osteoporosis • Managing ‘Whiplash’ Injuries • Sex and Back Pain

Chapter 12: Disc Transplants, Replacements, and Gene Therapy: They Sound Good, But Do They Work?149

Risks of Artificial Disc Replacement • Disc Transplants – Potential for the Future? • Hope in Gene Therapy

Glossary157

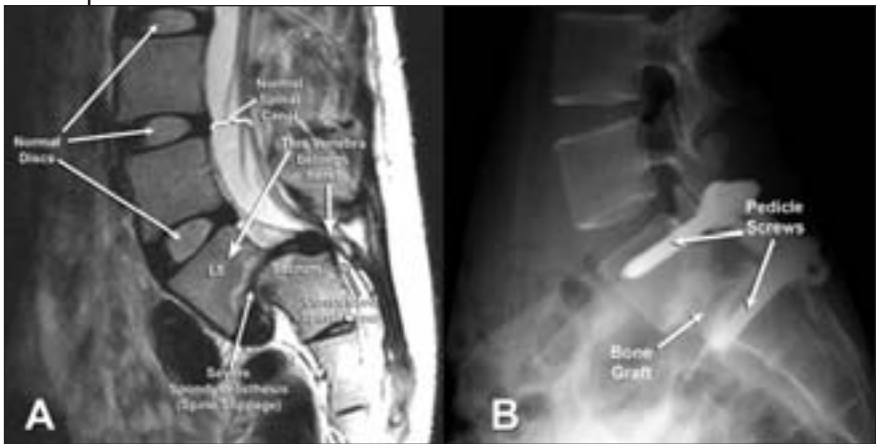
Index162

CHAPTER 7

What To Do If Your Pain Is From an Unstable or Deformed Spine

One in 20 people in North America have the inherited form of spondylolisthesis (slippage of the spine).

The most common deformity of the spine that can cause back pain or contribute to the severity of painful spinal stenosis is spondylolisthesis. You have



A) This side-view MRI scan of the low back shows a 50 percent slippage (spondylolisthesis) of the L5 vertebra on the sacrum. The spinal canal is highly constricted from the slippage, which caused this patient to have a lot of leg pain and difficulty walking. B) Side-view x-ray of the same patient's low back, one year after a bone graft was used to correct the slippage. The bone graft was held in place with pedicle screws and rods.

conquered half of this book when you can say spondy-lo-lis-thesis rapidly! Spondylolisthesis literally means spine (spondy) and slippage (listhesis). Literally, one vertebra slips forward on the one below. Just as with spinal stenosis, there are two forms of spondylolisthesis: the first one, isthmic spondylolisthesis, is inherited; and the other is secondary to disc degeneration, degenerative spondylolisthesis (occurs as a result of disc degeneration, see illustration on page 78).

One in 20 people in North America have the inherited form of spondylolisthesis. It most commonly occurs between the fifth lumbar vertebra and the sacrum (L5-S1) in your low back, coincidentally the most common level for disc herniation (see Chapter 5). It rarely occurs at other levels of the lumbar spine and in the neck. The inherited defect that allows the fifth vertebra to slip forward on the sacrum is in the bony arch that I described to you in Chapter 6. The defect occurs in the part that connects the superior articular process to the inferior articular process (pars interarticularis defect, a.k.a. pars defect). This defect, with or without a slippage of the vertebra, first appears in the second decade of life between the ages of 10 and 20 years. It is usually discovered on x-ray when a young person complains of back pain. However, most of the time it is painless and a person does not know they have it.

One of my colleague's sons was a college football player who was complaining of back pain. I examined him and thought I could feel a step off between the two lowest spinous processes in his low back. An x-ray of his spine confirmed my suspicion that he had spondylolisthesis at L5-S1. I let him continue playing football while wearing a corset, and his back pain eventually went away on its own. He is now in his 40s and rarely complains about his back.

There are all degrees of spondylolisthesis, from just a defect in the pars to total slippage of the fifth vertebra off of the sacrum and into the pelvis (spondyloptosis – you do not even have to try and say this word), a very difficult condition to treat for the patient as well as the doctor. I have only had to treat two patients with this condition in my career. Most patients have between a 25 and 50 percent slippage. The degree of slippage does not determine whether the condition is painful. Back pain may develop if the slippage makes the spine susceptible to repeated sprains. The most