AN INTRODUCTION TO

LUMBAR DEGENERATIVE DISC DISEASE

This booklet is designed to inform you about lumbar degenerative disc disease (DDD). It is not meant to replace any personal conversations that you might wish to have with your physician or other member of your healthcare team.

Not all the information here will apply to your individual treatment or its outcome. The information is intended to answer some of your questions and serve as a stimulus for you to ask appropriate questions about spinal alignment and spine surgery.
The human spine is comprised of the cervical (neck) spine, the thoracic (chest) spine, the lumbar (lower back) spine, and sacral bones. The entire spine is made up of 24 bones, called vertebrae.

These vertebrae are connected by several joints, which allow you to bend, twist, and carry loads. The main joint between two vertebrae is called an intervertebral disc. The disc is comprised of two parts, a tough and fibrous outer layer (annulus fibrosis) and a soft, gelatinous center (nucleus pulposus). These two parts work in conjunction to allow the spine to move, and also provide shock absorption.
What is Lumbar Degenerative Disc Disease?

Lumbar degenerative disc disease (DDD) is defined simply as the wear and tear of intervertebral discs that act as cushions for the spine. This wear and tear may result from normal aging, or may be due to longstanding trauma.

DDD typically begins with a decrease in the water content of the nucleus pulposus and can lead to tears in the annulus fibrosis.

Disc degeneration can lead to disc bulging, development of bone spurs or osteophytes, and loss of disc space height and/or alignment. This can cause nerve impingement, which may result in pain.
With advanced DDD, the loss of disc height can lead to segmental instability resulting in disc slippage (degenerative spondylolisthesis) or asymmetric disc height loss, causing a side-to-side curvature of the spine (degenerative scoliosis). These advanced degenerative changes affecting the discs, joints, and surrounding soft tissues can further result in the narrowing of the spinal canal, also known as degenerative stenosis. This can put increased pressure on the spinal cord and spinal nerves that pass through the spinal canal.

What are the Symptoms?
Symptoms of DDD may include:

• Low back pain
• Pain, numbness, or tingling in the legs
• Strong pain that tends to come and go
• Pain that worsens when bending, twisting, and/or sitting
• Pain is relieved when lying down

If you feel that you are experiencing any of these symptoms, you should consult a physician for an accurate diagnosis.
What are the Treatment Options?
If DDD is established as a diagnosis, your doctor may recommend one or more of the following treatments based on your individual condition:

• Physical therapy and strengthening exercises
• Rest and a restriction of physical activity
• Injections (corticosteroids) to help reduce the pain and swelling
• Medications and analgesics to reduce pain and swelling
  (typical medications include non-steroidal anti-inflammatory drugs, or NSAIDs)

Surgical Solutions
If your symptoms do not improve with other methods, your physician may suggest spinal surgery. Surgical solutions for DDD may include the following:

• Decompression surgery, such as laminectomy
• Decompression with fusion surgery
• Anterior Lumbar Interbody Fusion (ALIF)
• Posterior Lumbar Interbody Fusion (PLIF)
• NuVasive® MAS® PLIF
• Transforaminal Lumbar Interbody Fusion (TLIF)
• NuVasive MAS TLIF
• NuVasive XLIF® eXtreme Lateral Interbody Fusion
If you have any questions about Degenerative Disc Disease or spine surgery in general, please call or see your physician, who is the only one qualified to diagnose and treat your spinal condition. This patient information brochure is not a replacement for professional medical advice.

RESOURCES

For more information about degenerative disc disease please visit:  
www.nuvasive.com

If you would like to learn more about patient support and education for chronic back and leg pain sufferers and their loved ones, please visit:  
www.thebetterwayback.org
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