## Adjacent segment disease

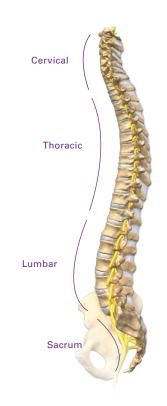
This booklet provides general information on Adjacent segment disease (ASD). It is not meant to replace any personal conversations that you might wish to have with your physician or other member of your healthcare team. Not all the information here will apply to your individual treatment or its outcome.

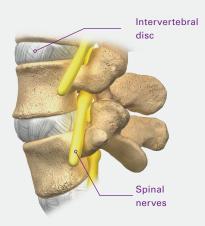


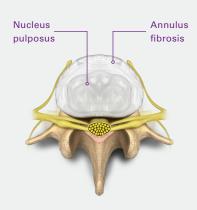
#### About the spine

The human spine is made up of 24 bones or vertebrae in the cervical (neck) spine, the thoracic (chest) spine, and the lumbar (lower back) spine, plus the sacral bones.

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 made 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 adjacent segment disease?

Adjacent Segment Disease (ASD) is a degenerative disc disease (DDD) that can result from pressure at spinal levels directly above or below the site of a former spinal fusion procedure. Following a fusion, that area of the spine typically becomes immobile which may cause abnormal loads to adjacent spinal segments that are compensating for the loss of movement

ASD can also be attributed to the natural progression of DDD or the wear and tear of intervertebral discs which act as cushions for the spine. This wear and tear may result from normal aging, or may be due to longstanding trauma.

ASD can lead to disc bulging or disc herniation, development of bone spurs or osteophytes, and loss of disc space and/or alignment. This can cause nerve impingement which may result in pain at the levels adjacent to the previous fusion.



### What are the symptoms?

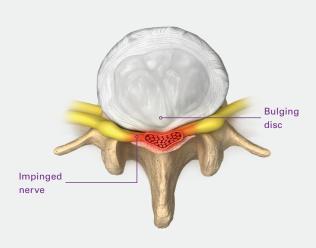
Symptoms of ASD include:

- Pain at or near the previous fusion level
- Pain, numbness, and tingling sensation in your arms or legs
- Strong pain that tends to come and go
- Pain that worsens as you move your extremities
- Symptoms that improve when you sit, lean forward, lie on your back, or sit with your feet raised

#### What are the treatment options?

If ASD is established, 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 ASD may include the following:

- NuVasive® extreme Lateral Interbody Fusion (XLIF®)
- NuVasive Maximum Access Surgery (MAS®)
   Posterior Lumbar Interbody Fusion (PLIF)
- PLIF
- Total Disc Replacement



Notes
Resources
For more information about spine surgery, please visit: nuvasive.com
If you would like to learn more about patient support and education for chronic back, leg, and neck pain sufferers and their loved ones, please visit:  thebetterwayback.org

If you have any questions about ASD or spine surgery, please call or visit 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.



#### About The Better Way Back®

The Better Way Back is a nationwide patient support program created by NuVasive\*, a leader in developing minimally invasive, procedurally-integrated spine solutions. The Better Way Back is a free community built on the power of empathy, and is dedicated to providing hope, support, and information to individuals suffering from chronic back, leg, or neck pain.

Through its Patient Ambassador Program, The Better Way Back pairs patients considering spine surgery with patients who have previously undergone a spine procedure. Ambassadors volunteer their time to discuss their experiences in order to provide additional, first-hand perspectives.

To learn more about The Better Way Back, please



call **1-800-745-7099** 



visit thebetterwayback.org



text "TBWB" to **858-360-8292** 

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