

DynaWell® L-Spine

Patient information

prior to examination with axial compression of the lumbar spine during magnetic resonance imaging, MRI.

Purpose: During this examination we will be trying to create the same conditions in your lower back which are causing you to experience your symptoms. This will enable us to make a more relevant and accurate diagnosis.

You have received an appointment for **examination of the lumbar spine with load/axial compression**. This means that, we'll use a compression device to simulate the pressure on your spine when standing. This will enable us to see the vertebrae and other parts of the lumbar spine **in the same condition as when the symptoms occur**. Your examination will include the following basic steps:

Pre-examination

Before the scanning procedure, you'll be fitted with a special compression vest with side straps (hanging from the bottom of the vest) and two adjustable chest straps. You will lie down on the examination table and be asked to **stretch out your legs**. A nurse will then lift a compression monitoring device onto the table and help you **position your feet on the foot plates**.

You will also be given a **hand-held signaling device** to squeeze if you want to speak with us during the examination.

Scanning with compression

We will use the compression device to simulate the downward pressure on your back when you're standing. To begin with, your nurse will tighten the chest straps. For optimal results, **the vest should be snug** and you should concentrate on **breathing with your chest** to get an adequate load on your spine.

Once the vest is secure, the nurse will connect the side straps together with the compression device. Your spine will then be slowly compressed to no more than half your body weight – that is, the same amount of pressure on your back as when standing. During this tightening process, you should not feel any significant pressure on your shoulders since the compression will be distributed across your chest. You will then be loaded into the scanner for examination.

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After scanning

Once the scanning is complete, you will be asked to bend your knees to release the pressure. A nurse will then release the side straps. **During compression**, you may well feel the same pain you experience when standing (the whole point of this procedure). However, if the pain or discomfort becomes excessive or feels very different from what you normally experience, you **MUST** inform us by squeezing the signaling device in your hand. In such situations, to ease the pressure, slowly bend your knees.
