

Discogram

When do I need a discogram?

A discogram is a provocative imaging technique that allows an X-ray examination of the intervertebral disc, which is the material between your bony vertebras.

Discograms are usually done prior to surgery to help diagnose the level (or levels) of your spine that are causing your symptoms and to help decide the type of operation that may be needed. It involves a dye being injected into the centre of the subject disc.

This allows the disc to be clearly visible on X-ray film and on a fluoroscope. By doing this, it enables the internal structure of the disc to be examined, allowing the radiologist to determine whether or not the disc has begun to rupture. They are looking for any tears within the annulus of the disc (its tough outer shell). The injection of fluid into the disc also causes an increase in pressure within the disc and can cause subsequent pain.

Normal discs generally do not cause pain, even if they are discs that have undergone degeneration. The results of the discogram then provides detail to your surgeon on whether or not the disc is the pain generator in your spine.

How do I prepare for my discogram?

Prior to booking your discogram, you will be asked to complete a series of safety questions to find out if it is suitable for you to have a discogram performed. If you should answer YES to any of these questions, it is important that the radiology company is notified. These questions will include:

- Do you take any blood thinning medications?
- What blood thinning medication do you take?
- Are you allergic to Iodine?
- Have you had an injection of contrast (X-ray dye)?
- Have you had an allergic reaction to contrast (X-ray dye)?
- If yes, what was your reaction?
- Have you any allergies to any other medication?
- What are the medications you are allergic to?
- Do you suffer from any bleeding disorders?

Prior to arriving for your discogram, you will also be required to cease taking any pain relief medications for 6 hours prior to the procedure as these medications may influence your ability to determine if the disc is painful or not during the test. You will also be required to fast (nothing to eat or drink) for 2 hours prior to the discogram.

It is important that you bring with you:

- The referral from your surgeon
- Your Medicare and heath fund cards.
- Your usual pain relief medication to take at the completion of the discogram.

You also need to organise for someone to drive you home following your discogram, as you will receive some light sedation prior to the discogram. It is important to note that this sedation will not be enough to put you to sleep; however, it is enough to disqualify you from driving for 24 hours.

How is a discogram performed?

Once you arrive for the discogram, you will have a cannula inserted into a vein in your arm, which will remain

in place until you are ready to go home. Through this cannula you will receive some intravenous sedation. Patients are then positioned on a specialized table with a fluoroscopic X-ray unit positioned adjacently.

It is important to make sure that you are comfortable during this step, as you will need to remain in this position for up to 30 minutes.

Your back/neck will be thoroughly cleaned and sterile drapes are positioned. The radiologist will be in a sterile surgical gown. You will be given some light sedation and a local anaesthetic will be injected to numb the area of your back/neck to be tested.



Using X-ray guidance, the radiologist directs a fine, long needle into the centre of the disc (nucleus pulposa). Some patients may feel a quick, sharp pain as the needle enters the disc. On a rare occasion a patient may experience a burning sensation if the needle touches the nerves which run closely to the disc and supply the limbs.

If you experience shooting pain or nerve sensations in your limbs, let the radiologist know and they will reposition the needle.

The location of the needle is confirmed using the X-ray and then a small amount of contrast dye (X-ray dye) and antibiotic is injected into the disc to cause an increase in pressure. A CT scan is then performed to see the cross section of the disc. More than one level may be tested in order to determine which levels are normal.

During the procedure, whilst the contrast is injected, it is particularly important that you concentrate on what you are feeling. You will be asked specific questions, such as:

- On a scale of 0 to 10 what level of discomfort / pain are you experiencing?
- Where are you feeling the discomfort / pain
- Is the discomfort / pain a different, similar or identical style of pain to your normal pain?

You may also receive a 'Dallas Pain Questionnaire' from the radiologist to be completed.

It is important you remain as still as possible during the procedure. At times you may be asked to hold your breath.

Usually the discogram procedure takes between 20 – 40 minutes; however, you should allow around 3 hours for the appointment.

What can I expect after the discogram?

As you have had sedation, you need someone to drive you home. In the 24 hours following the procedure you should not drive, work machinery, drink alcohol or sign any legal documents.

Rest is advised for the remainder of the day and you may resume your normal medications and diet.

Patients generally experience some soreness from the needle punctures which may last several days. The increase in pressure within a damaged disc may also cause a flare up of your back/neck pain that will generally settle over a few days. Simple analgesics such as paracetamol or ibuprofen and applying an ice pack may help ease this pain.

If your pain does not settle over a few days, please contact Gold Coast Spine's Practice Nurse.

Occasionally, the reproduction of a patient's pain symptoms is so pronounced that the patient may be admitted to hospital for pain relief and observation following the discogram. This admission is not commonly required following a routine discogram.

What are the risks of discograms?

Temporary pain is commonly experienced post-discogram. As the test is meant to bring on your pain, this can be expected in many patients. The risks associated with a discogram include infection of the disc (discitis), an allergy to the dye injected, damage to surrounding structures but these are uncommon risks. There is also the very remote risk of nerve root injury or spinal headache.

Every precaution is taken to ensure that the area is sterile prior to the injection. Antibiotics are also given into the disc to prevent any infection. Since the procedure uses a CT scan, the test also involves exposure to radiation.

There is also a risk of bruising (haematoma) around the injection site.

Delivery of Results

After your discogram, the images will be reviewed for clarity and accuracy by the radiographer. Images obtained from your discogram are digitally recorded and stored. A radiologist interprets the images and provides a detailed report for your surgeon within 24 hours.

Your surgeon will review the discogram results with you at your next appointment.

If the discogram was performed by <u>Qscan (www.qscan.com.au)</u>, patients are able to access their X-ray report and images electronically via the Qscan patient online app and web portal.

How much will it cost?

Some investigations are bulk billed while others have out-of-pocket costs associated. This can depend on the investigation and the radiology clinic performing the investigation. If Gold Coast Spine staff book an investigation for you, we will advise you of any costs.

A radiology referral can be taken to any Australian radiology company and the investigation performed. However, our surgeons have very specific requirements in relation to most of their investigations and it is important these are met each time an investigation is performed.

Should you wish to take your referral to another radiology company, please check with one of our staff first to ensure that the correct imaging is taken.