DAB radiology

Computed Tomography (CT) Procedures

At DAB Radiology we perform a range of diagnostic and therapeutic CT procedures. The following guide will explain these procedures and outline some important information for you.

Joint Injections

For large joints such as knees, shoulders, hips and ankles it is often recommended that pain relief injections are done under CT guidance. By using the guidance of CT imaging, the radiologist is able to get a clear view of where to inject the medication to give you the best result. Pain relief Injections for these joints are usually done for osteo arthritis or other conditions like adhesive capsulitis.

On the day of the procedure, you will be taken through a consent form by our clinical staff prior to the injection. They will explain the procedure, run through any risks as well as take you through the aftercare protocols. You will need to rest for 48 hours post procedure. The CT technician will set you up on the scanners bed so that the joint to be injected can be scanned with a map on it to guide the radiologist. After the initial very short scan the radiologist will mark the area appropriate for needle insertion. You will be given a local anaesthetic into the area. Once the anaesthetic has been injected the radiologist will insert the needle prior to doing another short scan to make sure that it is in the correct place. The radiologist may adjust the positioning of the needle more than once with a short scan in between each. Once the needle is optimally positioned, the medication will be injected. This will be the of the procedure. At this point the clinical staff will go through the aftercare with you while assisting you off the scanner to be able to leave. In most cases you will need to have someone available to drive you home.

Arthrogram

A CT arthrogram is a diagnostic CT procedure to gather information about the soft tissues within joints such as knees, shoulders and hips. Often used prior to or in lieu of an MRI Scan. A CT Arthrogram involves the radiologist injecting the joint with a contrast media that can highlight any damage or irregularities within the soft tissues of the joint.

You will be taken through a consent form by the clinical staff to explain the procedure in full as well as the risks and the aftercare involved. This procedure first involves an injection of a local anaesthetic, followed by positioning a needle into the joint. After confirmation of needle position, a contrast media will be injected into the joint space followed be some small exercises to spread the contrast around the joint followed by a final scan to acquire the images of the joint.

We advise that someone be available to drive you home after the procedure. A rest for 48 hours afterwards is also advised.

Facet Joint Injection

The facet joints are sliding joints in the spine which allow mobility. As with other joints they can develop arthritis and cause pain. A CT Guided facet joint injection allows a radiologist to inject the arthritic joint with a mixture of long-acting local anaesthetic and cortisone (a steroid) to relieve the pain.

After being taken through a consent form, the risks involved and the aftercare procedures the CT technician or clinical staff will set you up on the CT scanner bed with a grid taped to the area of the spine. Some CT images of the area will be taken to allow the radiologist to plan where to place the needle for the injection. Once this is done, they will mark the area and proceed in giving you a local anaesthetic. This may sting a little but will pass very quickly. The radiologist will then pass a very fine needle through the skin and underlying tissues until it enters the joint in question. The radiologist may ask the technician do multiple scans through this process to make sure that the needle is in the correct position. Once position of needle is confirmed, the radiologist will inject a mixture of cortisone and a long-acting local anaesthetic. These medications will reduce the inflammation and therefore assist with pain relief in the area and in some instances leads to cure.

You will need someone available to drive you home from this procedure. It can take up to two weeks for you to feel the full effects of the medication and the length of time that you will have relief is different for every person.

Nerve Root Sleeve Injection

Throughout the spine are nerves that occasionally become pinched, trapped, or compressed. This will cause radicular pain or numbness that can affect the arms or legs depending at which level the nerve has been affected. The aim of a nerve root sleeve injection is to inject a mixture of a long-acting local anaesthetic and cortisone (steroid) to reduce the inflammation to assist with pain relief. The length of the pain relief will differ for each person and in rare cases a patient may not feel any relief. It is very important to have someone available to drive you home from this procedure and to rest for at least 48 hours after the procedure.

You will be taken through a consent form for the procedure that outlines the risks involved as well asking some medical questions and explaining the aftercare in depth. You will be asked to lay on the CT scanner bed and a grid will be taped to you to assist with the planning of the injection. A short scan will be taken that will be viewed by the radiologist. A mark will then be placed on your skin that will guide the radiologist and the CT technician throughout the rest of the procedure. You will be given a local anaesthetic that may sting for a few moments. The radiologist proceeds to pass a fine needle through the skin and the underlying tissues until it contacts the intended nerve. During this time, you may have multiple short scans and the radiologist will manipulate the needle to ensure the best possible position. While the medication is being injected you may feel some pain or tingling in the area of the body that had same symptoms as before.

After the procedure it is important to follow the instructions of staff so that you get the best result possible.

Epidural Injection

Epidural injections are used to assist with the treatment of neck, back, arm and leg. At DAB Radiology we perform two types of epidural injections.

- A caudal or trans sacrum epidural is used to treat back pain and symptoms of sciatica. It targets multiple levels at once. This procedure is generally used for patients who have multiple nerve issues at different levels that contribute to their pain. Can also be used when the other epidural methods prove technically difficult to do
- A transforaminal epidural is when the injection is delivered using the spinal foraminal route to reach a specific nerve and level to assist in relieving the symptoms of radiculopathy.
- A trans lamina approach can also be used to access the epidural space.

It is important for an epidural to follow all of the instructions given to you by your referring practitioner, the clinical staff, CT technician and the Radiologist. This would be both during the procedure and for the aftercare. You must have someone available to drive you home and you will be asked to rest for 48 hours post procedure. You may also be asked to wait at the practice for 30 minutes after the procedure so our nursing staff