

Medial branch blocks

What is a medial branch block injection?

A medial branch block injection is an injection of a mixture of local anaesthetic and hydrocortisone (steroid) around small nerves that take the pain messages away from the facet joints in your spine. The injection is targeted at the level(s) thought to be causing your symptoms.

The facet joints are small joints in your spine that help to stabilise your spine, whilst allowing movement. Facet joints can become painful following direct wear and tear, inflammation, or injury. This can occur at any level of your spine but is most common in the cervical spine (neck) or lumbar spine (lower back).

Medial branch block injections are primarily a diagnostic tool to confirm that your facet joints are the generator of your pain. They also aim to provide you with a pain free window during which you can engage in a more optimal period of rehabilitation.

How do we do it?

Medial branch block injections are carried out as a day case procedure in an operating theatre. To minimise discomfort, the injection is performed under sedation, which is administered by an anaesthetist. The injection needles are inserted into the correct position using X-ray guidance.

What are the risks?

Infection – there is a risk of infection at the injection site, but this is rare due to the use of sterile techniques.

Bleeding – there is a very small risk of infection at the injection site, but this is rare. To minimise bleeding, we do ask that any medication that might increase your bleeding risk be stopped prior to the injection.

If you are on any medication that has the potential to thin your blood such as aspirin, clopidogrel, warfarin, rivaroxaban or any other blood thinning medication then we do need to know about this prior to the date of your injection as this will usually need to be stopped prior to your injection.

Injection site discomfort – following the injection you may have some localised soreness at the injection site, for which you can take some simple painkillers and it should settle over a few days.

Side effects from the injected steroid – there are very few side effects when steroids are administered this way. Occasionally patients may notice some facial flushing, nausea, or mild

abdominal cramps for a few days following the injection. There can also be a temporary disturbance to the menstrual cycle. Diabetics may find that the steroid alters their blood sugar control for a few days, so should monitor it closely.

Allergic reaction – an allergic reaction to injected steroid and local anaesthetic is incredibly rare. However, you must inform us of any known allergies beforehand.

What can I expect following the injection?

After you have had the injection you will spend a few minutes being monitored in the recovery room before being taken back to the ward. Once back on the ward, most patients will feel like having a short sleep. When you are ready to get up, you must call for one of the nursing team and only get up when they are with you as sometimes patients feel a little bit unsteady when they first get up following an injection. This will quickly pass. You will normally be able to leave hospital once you have had something to eat and drink, you are safely mobile and you have passed urine. This is normally one to one and a half hours following your injection. As you will have had sedation you will be unable to drive for 24 hours following the injection and will need to arrange for someone to collect you from hospital.

After the injection we normally use a spray on dressing that requires no removal or special care. You should keep the injection site dry for six hours. Beyond this, there are no special wound care instructions. If a small dressing is used, then this can be removed after six hours.

We would advise that you have a restful day the day after your injection, but it is important that you keep moving around and do not spend the whole day sitting or lying. On the second day following your injection try and take a few short walks, and on the third day you can return to normal activities and start to do some gentle exercise. There are no other restrictions following the injections.

Approximately 65% of patients have a good response following a medial branch block injection. However, the benefits are not always long lasting. The hydrocortisone can take a couple of weeks to have its full effect, so you may not notice an immediate benefit. These injections are not curative but aim to alleviate the pain that is preventing you from functioning normally. This provides you with a window of opportunity to gain long-term benefit from your subsequent rehabilitation.

What next?

Exercise is essential in the management of lower back pain arising from your facet joints, and it is important that you start to undertake exercise whilst you are pain free so that you gain the maximal long-term benefit. You will be referred to a physiotherapist following your injection.

Once you have seen the physiotherapist it is important that you find time to work on your exercises at home. The benefit from physiotherapy is gained from improving your muscular control and support. This requires regular work at home and will not be achieved by just turning up for your physiotherapy appointments. It is important that you build up any unaccustomed activity gradually. Any unaccustomed exercise is likely to cause you some muscular discomfort (especially the following morning) – this does not mean that you are doing yourself further harm.

Follow-up

You will be seen back in the clinic a few weeks after your injection. If you have had good relief then you need to continue with your exercises and consider other activities that may help such as Pilates, yoga, or swimming. If it has not been effective, or if the benefits have only been short lasting then other forms of treatment may need to be discussed. If you have had a good period of relief which subsequently wears off, then you may be a suitable candidate for a further procedure called facet joint Rhizolysis or Denervation. This is where the nerves around which we injected for the medial branch blocks get cauterised to hopefully provide a more lasting period of relief. The medial branch blocks are a diagnostic procedure to see if you are a suitable candidate for this further procedure.

More information can be found in the booklets section of the patient's area on the British Association of Spine Surgeons website (www.spinesurgeons.ac.uk)