Patient information

NHS Foundation Trust

Neurolytic coeliac plexus block

The coeliac plexus is a group of nerves that supply organs in the abdomen. It is also sometimes known as the solar plexus. A coeliac plexus block is a pain management procedure that may be performed if you are experiencing severe chronic abdominal pain or abdominal pain from cancer. Alcohol is injected under direct vision to neurolyse (destroy) the nerve tissue. Local anaesthetic is first injected to help lessen the pain of the injection of alcohol.

Benefits of the procedure

Your pain may be improved by the neurolytic coeliac plexus block, and you may have less need for strong pain relief medication (such as morphine). Studies suggest that up to 80% of people (8 in 10) may have improved pain and that many benefit from reduction in opioid requirements by having fewer opioid-related side effects (for example, constipation).

What happens before the procedure?

We will inform you where and when to report for the procedure. Prior to the procedure, we will send a letter with instructions regarding being nil by mouth. This is usually no food for six hours prior to the procedure and no water up to two hours before.

You will be examined by your doctor and asked to rate your pain. You will be asked to not take your long-acting pain medication on the morning of the procedure, but you can take your short acting medication. A set of observations will be recorded and if there are any causes for concern, the procedure may have to be postponed.

If written consent has not been taken before, the doctor will consent you for the neurolytic coeliac plexus block with a full explanation of the intended risks and benefits. If you have any questions or concerns, please do not hesitate to ask.

When ready, you will be taken into the interventional endoscopy theatre and an IV (intravenous) drip will be inserted before the anaesthesia (or sedation) is given.

It is very important to let us know:

- If you are taking any blood thinning medication such as warfarin, other newer blood thinners such as dabigatran or rivaroxiban, heparin or other similar injections (for example tinzaparin, enoxaparin) or aspirin. These may need to be temporarily stopped around the time of the injection.
- If you have had a recent illness or surgery
- If you have any problems passing water
- If you are allergic to local anaesthetic.

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Description of the procedure

We will obtain your consent after providing you with a full explanation of the benefits and risks of the procedure. Neurolytic coeliac plexus block can be performed by two different approaches:

The main technique used at The Royal Marsden uses **endoscopic ultrasound guidance** to insert the needle through the stomach and directly into the coeliac plexus. This involves passing an endoscope into the mouth, down the oesophagus (gullet) and into the stomach - the coeliac plexus lies just outside the stomach. This approach is done in and under direct visualisation. The procedure is carried out under general anaesthetic in the Endoscopy Suite (see image below).

An alternative approach for the neurolytic coeliac plexus block is performed under **CT guidance** by passing a needle through the skin (percutaneous) of the abdomen into the coeliac plexus. This is performed in the CT scanner in the radiology department. The procedure is carried out under sedation and an injection of local anaesthetic is used to numb the area.



Potential complications

Temporary related to procedure

- Diarrhoea
- Low blood pressure
- Bleeding
- Infection

Potentially permanent

- Failure to relieve the pain
- Loss of bladder and erectile function
- Paralysis (rare).

- Pain during the procedure
- Collapsed lung
- Bloody urine.





After the procedure

On recovering from the anaesthetic/sedation, we will make observations including rating your pain. You will then go to the recovery area in the Endoscopy Suite to be monitored. Following the procedure, your blood pressure may be low. It is not unusual to feel a bit dizzy, especially when getting up. Try and seek assistance when first standing or walking after the injection. This usually improves between 24 – 48 hours. Pain may be worse, but this will be temporary. If the increased pain persists for more than two days, let your doctor know.

Usually, patients are admitted overnight. If all observations are stable, you will be discharged the second day.

Follow up

Any potential issues are usually noted in the first few hours after the procedure – this is why a few hours of observations are needed. We will ask you to keep a record and keep track of your pain. Some pain relief is usually achieved in a few days and sometimes sooner.

Contact details

If there is an issue with the time or the organisation of the coeliac plexus block, please contact:

The Pain Team Secretary	020 7808 2771
(Monday to Friday 9am - 5pm)	

If you have any concerns following the procedure, please contact:

The Pain Team Nurse Specialist	020 7811 8093
(Monday to Friday 9am - 5pm)	

Outside of normal working hours, please contact:

The Royal Marsden Macmillan Hotline	020 8915 6899
(available 24 hours a day, 7 days a week)	

If the issue is urgent, depending on the situation, either contact your GP or go to your local Accident and Emergency Department. Be sure to let them know you have had a 'neurolytic endoscopic guided coeliac plexus block'.

Symptoms to look out for include:

- A temperature higher than 38.5°C
- Weakness or numbness in your arms or legs
- Severe pain or worsening pain
- Shortness of breath or trouble breathing
- Blood in your urine.

