Coeliac plexus block

A coeliac plexus block is an injection around the coeliac plexus. Pain from the upper part of the abdomen can send pain messages through this point. The organs involved are usually the pancreas, liver, or rarely, the upper intestines.

The coeliac plexus is also known as the solar plexus. A ‘plexus’ is a bundle of nerves that come together, sending out many branches and communications. It can be thought of as the main junction box for autonomic nerves supplying the upper abdominal organs such as the liver, gall bladder, spleen, stomach, pancreas, kidneys, small bowel, and the majority of the large bowel. The coeliac plexus is close to the spine at the level of your umbilicus, which is commonly known as the tummy button.

Indications for coeliac plexus block

- **Chronic pain**: Useful for any condition that causes severe upper abdominal pain such as chronic pancreatitis

- **Cancer pain**: Useful for upper abdominal organ cancer pain, such as carcinoma of the pancreas

It is most important that you inform the Pain Clinic if you are taking drugs to thin your blood, for example Warfarin and Clopidogrel. The doctor will then provide guidance as to whether there is a need to temporarily stop any blood thinning drug. Please note some of these medications may need to be stopped for 2 - 7 days prior to your intervention.
The day of treatment

The procedure is carried out from the Medical Treatment Unit. You will be required to come in for a morning or afternoon appointment. On arrival please hand in your completed health questionnaire. You will then be asked to put on a theatre gown. The doctor will discuss the procedure and you will be asked to sign a consent form. The procedure will be carried out in the Radiology Department.

Either in the Medical Treatment Unit or once in the treatment room a small needle will be placed in the back of your hand. This is essential for safety reasons and allows the doctor to give you sedation and fluids. The procedure will be carried out under X-ray screening. This allows the doctor to locate the coeliac plexus.

You will be asked to lay face down on the X-ray table and the doctor will clean your back with a cold antiseptic fluid. Local anaesthetic will be injected into your back, which may sting at first, but the area soon becomes numb. Two spinal needles are normally inserted and radio-opaque dye is injected to confirm the correct placement of the needle. You may feel a pushing sensation and some discomfort at this stage.

Once the needles are in the correct position, for non-cancer pain, local anaesthetic is injected around the coeliac plexus. Phenol is also used if the procedure is being performed for pain resulting from cancer. Although a feeling of tightness may be felt you should let the doctor know if you feel pain. A small dressing may be applied to the injection site which you may remove in the next few hours.

Following your injection

After the procedure you will be taken to the recovery area within the Medical Treatment Unit. You may feel a little drowsy and wish to sleep. Your abdomen may feel strange and a little numb. This is normal. The nursing staff will observe you. You will be asked to lay flat for approximately 45 minutes. When sitting up, light refreshment will be offered. Your blood pressure and pulse will be checked at regular intervals as directed by your doctor and a final check again once you are dressed and ready for discharge.

Please ensure that you have arranged for someone to collect you after the procedure. Failure to do so will result in your procedure being cancelled.

Following sedation we recommend that you arrange for somebody to stay with you overnight and that you do not drive for 24 hours after the procedure.
Benefits

- If you have suffered with sickness this may improve
- Pain reduction
- Reduction in the amount of pain relieving drugs required

Risks

All procedures in medicine carry a risk of complications. Precautions are always taken to minimise the risk as far as possible but the following may occur.

Coeliac plexus block risks

Very common and common side effects (1 in 10 and 1 - 100 patients may be affected)

- Pain: Worsening of local posterior abdominal and back pain following celiac plexus block (usually temporary, for 2 - 3 days)
- Low blood pressure: May occur due to dilatation of blood vessel in the upper abdomen, it is usually transient (a few hours) and can be managed with intravenous fluids
- Diarrhoea: Another common self-limiting complication is diarrhoea which usually settles over approximately 48 hours
- Numbness in the injected area
- Bleeding or bruising to the injected site
- Failure of the procedure to help

Uncommon side effects and complications (1 in 1000 to a 1 in 5000 patients may be affected)

- Neurologic complications eg paraplegia, temporary leg weakness, sensory deficits and paraesthesias have been reported rarely
- Temporary loss of bladder and sexual function
- Puncture complications causing severe bleeding (eg aorta or inferior vena cava, liver, stomach, pancreas, bowels and lungs) are rare
- Lumbar nerve root irritation
Rare or very rare complications (1 in 10,000 patients to a 1 in 100,000 patients may be affected)

- Infection in the injected area
- Allergic reactions

What are the potential side effects of steroids?

There are minimal side effects associated with the injection of steroid into or around a joint next to a nerve or into muscle. Occasionally, patients may experience headache, mood swings and increased appetite, hot flushes, mild abdominal pain, fluid retention and raised blood sugars in diabetics. If you are diabetic you should closely observe your diabetic control for the next fortnight, as steroids raise blood sugars temporarily. Repeated and frequent use of steroids has the potential to lead to more serious effects but the doses given during this procedure are unlikely to result in serious side effects.

What to expect afterwards

On the day of the procedure, rest for a couple of hours before resuming your normal activities. Some people find that they get relief from their pain but after a few weeks or months this wears off. Others may experience complete relief. It is important that you monitor the effect of the injection on your pain over the next few weeks in a diary, as this will assist the doctors in planning further treatment. There is a possibility that the pain will either not improve, change or will get worse. If you are taking painkillers or other medication for pain, please discuss this with the doctor prior to undertaking the procedure.

As your pain decreases you should try to gently increase your exercise. Simple things like a daily walk, using an exercise bike or swimming will help to increase your muscle tone and strengthen your back. The best way is to increase your activity slowly. Try not to overdo things on good days, as this may cause an increase in your level of pain the following day.

If you become concerned about any matter following the procedure please telephone the Clinical Nurse Specialist answer phone. Alternatively if the matter cannot wait please telephone your GP or NHS 111 or contact your local Emergency Department.

A letter will be sent to your GP and a further appointment will be made for you to be seen in the Pain Clinic.
Points to remember

1. Nothing to eat for **six hours** and water only for two hours prior to your appointment.

2. If you are diabetic please phone the Medical Treatment Unit for advice and bring your medication with you on the day.

3. Please bring your glasses if you need them for reading.

4. Always bring a list of all current medication (tablets).

5. Continue taking all your regular medication on treatment day unless you are advised, by the Pain Clinic, to omit anything.

6. If there is any possibility that you may be pregnant, please inform a member of the nursing team.

7. All treatment takes place as an outpatient in the Medical Treatment Unit.

Your stay may be between 2 - 4 hours and before any treatment takes place, you will be asked to provide assurance that somebody is able to drive you home if you are undergoing injections.

Wound/puncture site infection

Injection puncture site infection is an uncommon complication of pain intervention treatment. Do avoid touching the puncture sites to reduce risk of infection. You may experience some slight bleeding at injection sites initially following the procedure, which will have had a dressing applied; remove as instructed. If the injection sites become red, swollen, hot and painful to touch, or discharge any pus, you may have developed an infection. You will then need to contact your GP for advice as to whether you need antibiotics.

Additional information

The information in this leaflet is not intended to replace your doctor's advice. If you require more information, or alternatives, or have any other questions, please speak to your doctor or contact one of the following:

Medical Treatment Unit

Tel: 01284 712967
Pain Clinic Clinical Nurse Specialists answer phone Tel: 01284 712528
Pain Clinic secretaries Tel: 01284 713580 / 713330

If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the website for AccessAble (the new name for DisabledGo) https://www.accessable.co.uk/organisations/west-suffolk-nhs-foundation-trust

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