

Celiac/Splanchnic Plexus Block

What is a Celiac/Splanchnic Plexus Block?

The celiac plexus and splanchnic plexus are groups of nerves in your abdomen that send signals from various abdominal organs (including the gallbladder, liver, pancreas, stomach and intestines) to the brain.

When there is irritation, injury or inflammation of the above organs, it can result in pain signals that are carried to the brain by the celiac and splanchnic plexus.

An injection of local anaesthetic (numbing medication) given at the level of these nerves can reduce pain in specific conditions.

Why do I need this procedure?

It can help treat or reduce abdominal pain that is not well controlled despite other pain medications/therapies.

These injections are usually (but not exclusively) administered for the following conditions:

- Pancreatic or biliary tract cancers
- Chronic pancreatitis
- Chronic abdominal pain



What are the preparations?

Your pain specialist will review your history and examine you prior to deciding if the block is appropriate to address your pain.

Please provide your doctor with accurate and complete information regarding:

- Medical issues
- Current medications, especially blood thinners
- Allergies
- Previous procedures, and
- Pregnancy or possibility of pregnancy

Specific instructions regarding fasting and your medications will be given to you separately, and should be followed closely as this allows us to perform the procedure as safely as possible.

How is a Celiac/Splanchnic Block performed?

- It is usually done with you lying face down on a table. In select situations, they might be done with you lying on your back. This procedure is commonly performed with X-Ray guidance to reduce the risk of complications.
- You might be given some medication to reduce your anxiety and discomfort associated with the procedure.
- The area to be injected is cleaned thoroughly with an anti-septic solution. Local anaesthetic will be injected under your skin to reduce the discomfort from the block needle.
- The block needle is then guided to an appropriate location with fluoroscopic (X-Ray) guidance. Some contrast (dye that is seen on X-Ray) will be injected to confirm accurate and appropriate placement of the needle.
- Local anaesthetic (numbing medication), with or without corticosteroids (anti-inflammatory medication) is then injected into the area to numb the nerves.

What are the risks and complications of the procedure?

Celiac or splanchnic plexus blocks are generally safe, with a low risk of serious complications.

Common side effects:

- Mild bruising and soreness at the injection site
- Diarrhoea (which usually resolves within a few days on its own)
- Low blood pressure (usually short lived and can be managed with medications and intravenous fluid infusion)
- Muscle spasm



Rare but serious complications:

- Infection around the injection site
- Bleeding
- Delayed emptying of stomach contents
- Inadvertent spinal or epidural block (difficulty breathing, numbness of the chest, trunk and limbs)
- Injury of the spinal cord or reduced blood flow to the spinal cord resulting in paralysis
- Injury to other surrounding structures, including possible pneumothorax (collapsed lung) for splanchnic plexus blocks or kidney injury for celiac plexus blocks
- Severe drug allergies
- Local anaesthetic toxicity
- Seizures

What can I expect after the procedure?

- You will be monitored for some time prior to discharge back home or to the ward. Your vital signs will be taken regularly and our nursing staff will discuss some post-procedure instructions with you.
- If you are being discharged home, you should be accompanied home by a responsible adult and you must not drive home by yourself.
- Some soreness is expected at the site of injection initially, but should improve. Keep the injection area clean and dry for the next 2-3days.
- There might be temporary initial worsening of your pain prior to improvement after about 2-7days.
- Your doctor will review you after the procedure to assess its effectiveness and counsel you regarding further management, which might involve a denervation (permanent block) of the celiac or splanchnic plexus for more long-term pain relief.

What are the other options?

Your pain specialist will discuss other therapeutic options to address your pain as indicated. These may include medications, physiotherapy, psychological intervention, surgery, or a combination of any of these modalities.



Contributed by Department of Anaesthesia

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