

EMORY PAIN CENTER

Splanchnic/Celiac Plexus Block or Neurolysis

What is the celiac plexus? Splanchnic nerves contribute to form the celiac plexus. The celiac plexus is a network of nerves that are located near the middle of the spine. These group of nerves provide innervation to the organs of the upper abdomen, such as the stomach, liver, pancreas, gall bladder, spleen, adrenal glands and part of the bowels. They are responsible for relaying the pain signals from the organs to the spinal cord and brain.

What are the indications for a splanchnic/celiac plexus block or neurolysis? If you have pain from upper abdominal cancer which is uncontrolled or are having intolerable side effects to the pain medications, you may be a candidate for this procedure.

What is a splanchnic/celiac plexus block or neurolysis? A celiac plexus (or splanchnic) block is when a physician injection numbing medication around the celiac plexus (or splanchnic nerves). A celiac plexus (or splanchnic) neurolysis is when a physician injects a medication (such as concentrated alcohol) that will damage the nerves of the celiac plexus, thereby shutting off the pain signal and relieving abdominal pain.

How is splanchnic/celiac plexus block or neurolysis performed? Your doctor will use a moveable x-ray machine to guide needles near this bundle of nerves on each side of the spine. Once your physician is satisfied with the needle placement, the treating medication will be injected. You will have the skin numbed before needle placement, and you will be given medication to relax you and to decrease discomfort related to the procedure.

How effective is a splanchnic/celiac plexus block or neurolysis? Up to 80% of well selected individuals will experience significant pain relief of their abdominal pain. The relief may be temporary (few hours to few days) with the block. However with the neurolysis, pain relief lasts for 8 weeks or longer. It may take up to 2 weeks for the relief from neurolysis to begin. Many patients discover they are able to reduce or eliminate their need for strong pain medications. If the pain returns, you may be eligible to have the procedure repeated.

What are the side effects/risks of a celiac plexus neurolysis? The most common side effects are dizziness due to a drop in blood pressure when moving from lying to standing quickly, called orthostatic hypotension, which affects approximately 50-80% of people and resolves within 1-1.5 weeks. Diarrhea affects approximately 50% and resolves in 1-1.5 weeks. Mild to moderate back pain for a few hours up to two days following the procedure affects 10-30%. Like all interventional procedures, there is a very rare risk of infection and bleeding, damage to nearby structures such as the lung (causing a pneumothorax), kidney (causing temporary blood in urine) or the bowels. There have been rare reports of serious complications such as paralysis in the literature, but it is extremely uncommon.