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Consultants in Acute and Chronic Pain Management

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NEWSLETTER



VOLUME 1 NUMBER 12

Celiac Plexus Block Relieves Intractable Abdominal Pain

When visceral structures are stretched, compressed, invaded or distended a poorly localized noxious pain is reported. Patients often describe the pain as vague, deep, squeezing, crampy, and colicky in nature.

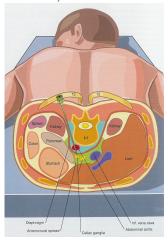
The celiac plexus (CP) is composed of a network of nerve fibers with both sympathetic and parasympathetic contributions. It contains two large ganglia that receive innervation from the three splanchnic nerves (greater, lesser, and least) and parasympathetic innervation from the vagus nerve. In most adults the plexus resides just anterior to the aorta at the level of the L₁ vertebral body. The CP is responsible for supplying innervation to most of the abdominal viscera including the distal esophagus, small and large intestines, pancreas, liver, and spleen.

The CP block was initiated into medical practice by Dr. Albert Kappis in 1914. He felt the most successful technique involved inserting a needle posteriorly to transverse the aorta at or around the level of the L₁ vertebral body. Blockade of the CP is classically indicated to treat visceral pain of malignant origin (pancreatic cancer). Other indications for a CP block include acute and chronic

pancreatitis, Crohn's disease, and pain related to surgery of the upper abdomen.

The technique of blocking the CP is performed with the patient in the prone position. Under fluoroscopy, a needle is placed approximately 5-8 cm left of the midline, and advanced through the aorta to lie anterior to the aorta. In the case of a local anesthetic block 20cc of .25% bupivicaine is administered, alternatively, in the case of neurolytic (permanent destructive) block 20cc of 100% dehydrated alcohol is given while monitoring for signs of central nervous system toxicity.

Although the procedure is generally safe, complications do exist and include damage to somatic nerves, bleeding, infection, paralysis, seizures, and death.



For Information and Referrals:

(610) 954-9040

Caring Compassion Commitment