## 13. Sympathetic Blocks for Cancer Pain: ClinicalCases Vakhtang Shoshiashvili - Tbilisi State Medical University, Georgia

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Approximately 38% of oncology patients experience moderate to severe pain. For 10% of these patients, pharmacological pain management is insufficient [1]. Consequently, interventional pain management becomes relevant, for which sympathetic blocks may be used [2]. Here, we present cases of percutaneous neurolytic sympathetic blocks performed under computed tomography (CT) guidance for cancer patients.

Case 1: A 62-year-old male, diagnosed with pyloroantral gastric cancer, T2N0M0, Stage IIB. Treatment: Distal subtotal gastrectomy. Reason for consultation: Severe abdominal pain, particularly on the right side, with ineffectiveness of analgesics.

A neurolytic block of the celiac plexus was performed. Following a transdiscal injection of 10 ml of 2% lidocaine and 30 ml of 95% alcohol, the pain was alleviated. Due to pain recurrence in the right upper abdomen, neurolysis at the L1 level was performed using 15 ml of 95% alcohol. Pain relief was achieved, with the patient receiving one injection of morphine in the evening and 150 mg of Lyrica twice daily.

Case 2: A 50-year-old male, diagnosed with pancreatic body and head cancer, T4NxM0. Treatment: Cholecystoenterostomy and gastroenterostomy. Reason for consultation: Severe pain in the upper abdomen, treated with non-steroidal anti-inflammatory drugs and intramuscular morphine injections every 4 hours. A neurolytic block of the celiac plexus was performed. Following a transdiscal injection of 10 ml of 2% lidocaine and 20 ml of 10% phenol, complete pain relief was achieved. Five days later, pain recurrence was noted in the right upper abdomen. An injection of 15 ml of 95% alcohol at the L1 level resulted in complete pain relief (no additional analgesics were required).

Case 3: A 38-year-old female, diagnosed with cervical cancer, post-hysterectomy, radiation, and chemotherapy, with recurrence and metastases in the small pelvis, combined rectovaginal-vesical fistula, bilateral hydronephrosis, post-bilateral ureterocutaneostomy, T4N2M1, Stage IV. Reason for consultation: Severe pain in the lower abdomen and especially in the perineal area, with morphine injections every 4 hours being ineffective. An upper hypogastric plexus neurolytic block was performed. Each side received an injection of 6 ml of 10% phenol and 2 ml of 2% lidocaine, resulting in relief of pain in the small pelvis and perineal area. However, the use of narcotic analgesics did not decrease.

**Conclusion:** The effectiveness of neurolytic sympathetic blocks depends on the injection technique, the volume and concentration of the injected solution, as well as the duration, nature of the pain, and the patient's dependence on narcotics. CT-guided percutaneous neurolytic blocks are safe, performed on an outpatient basis, and deserve broader application for cancer pain management.

## **References:**

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