OMT for Cancer Patients After Bowel Resection

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Patients with cancer typically have substantial somatic dysfunction that results from surgical procedures and treatment regimens, including radiation therapy and chemotherapy. Osteopathic manipulative treatment (OMT) can help reduce musculoskeletal symptoms, complications from treatment, and pain, and thus lead to earlier ambulation, shorter time to flatus, and shortened hospital stays.

In the **video**, we describe the application of 2 techniques for patients with colon cancer after bowel resection: release of the 12th rib via balanced ligamentous tension (BLT) and lumbosacral decompression with BLT. These OMT techniques, which should be applied to a patient in the supine position, may be safely and effectively used to improve respiration and postoperative ileus.

Postoperative patients may splint their breath or breathe in a shallow manner, limiting the motion of the diaphragm. However, diaphragm motion is important not only for aeration and prevention of atelectasis, but also for the movement of venous and lymphatic return from the abdomen and pelvis, including the colon. The diaphragm attaches anteriorly and laterally to the lower ribs at the costal margin and posteriorly attaches to the 12th rib as the lateral and medial lumbocostal arches or arcuate ligaments, covering the quadratus lumborum and the psoas muscles, respectively. By releasing the 12th rib via BLT, the operator can affect tension in the diaphragm via its posterior attachments and increase its overall excursion, helping to optimize intrathoracic and intraabdominal pressure gradients.

The parasympathetic innervation for the large intestine from the transverse colon onward travels via pelvic splanchnic nerves arising from the S2 through S4 ventral rami and enters the pelvic or inferior hypogastric plexus. In patients who have undergone bowel resection, lumbosacral decompression with BLT may assist the relief of viscerosomatic reflexes and improve parasympathetic outflow, improving postoperative bowel function. (doi:10.7556/jaoa.2018.014)

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Resources

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