

GASTROINTESTINAL CANCER SURGERY IN PATIENTS WITH A PRIOR VENTRICULOPERITONEAL SHUNT

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Background: The estimated prevalence of hydrocephalus in all age groups is between 1-1.5%. With placement of a ventriculoperitoneal (VP) shunt, such patients are expected to have relatively normal life expectancies. There is minimal data concerning the risk of postoperative complications in patients undergoing subsequent major visceral operations unrelated to the shunt. We hypothesized that shunted patients who had curative-intent surgery for gastric cancer or colon cancer would often have significant intraperitoneal adhesions due to the shunt and that high rates of adverse outcomes would be observed in these patients.

Methods: We assumed that all veterans were generally healthy and that none had significant brain disorders or a VP shunt on entry into military service. We searched VA databases for fiscal years 1994-2003 to identify all patients with computer codes for VP shunt, subsequent gastric cancer or colon cancer and a surgical procedure for the cancer. A chart review was conducted to determine their postoperative course.

Results: There were 5 patients with gastric cancer; 2 met our criteria. Fourteen patients had codes for colon cancer; 4 met our criteria. One of these 6 evaluable patients (17%) had excessive adhesions attributable to the shunt which resulted in intra-operative technical difficulties. There were no postoperative infections, shunt malfunction, or other complications following surgery. The VP shunts were managed with simple maneuvers such as isolating the shunt with a surgical sponge during surgery and treating preoperative infections before surgery.

Conclusions: To our knowledge, this is the first report in the English language literature analyzing the clinical course of adults with VP shunts for acquired conditions who later have major abdominal cancer surgery. The presence of a shunt was associated with dense adhesions in a minority of patients in this series but not with high risk of post-operative complications.