ABSTRACT NO. 23

ESTABLISHMENT OF A MINIMALLY INVASIVE PROGRAM AT A VAMC LEADS TO IMPROVED CARE IN COLORECTAL CANCER PATIENTS

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Introduction: Despite recent evidence that laparoscopic colectomies offer significant advantages over the open approach, the surgical community has been slow to embrace minimally invasive (MI) approaches to colorectal surgery. Furthermore, the feasibility of establishing a MI colorectal cancer (CRC) program in the VA system has not been evaluated. We hypothesize that constructing a comprehensive laparoscopic CRC program in our VA system would improve patient care without compromising safety or oncologic principles.

Methods: Retrospective review identified 39 consecutive CRC patients undergoing MI resections since program inception within the CRC Center in late 2006 and 39 age-matched controls treated with open resection. Clinical information was entered into a database which was queried to test our hypothesis. Statistical analyses included Fisher's exact test, Chi-Square, and two-tailed t-tests. MI approaches included laparoscopic and hand-assisted laparoscopic resections.

Results: Both patient cohorts had similar demographic distribution, BMI, as well as comparable co-morbidities. Morbidity and mortality were similar with a trend towards fewer overall complications in the laparoscopic group ($p = 0.07$) as well as fewer wound complications ($p = 0.056$). Intraoperative blood loss was significantly less in the MI group ($p = 0.03$) with slightly shorter operating times ($p = 0.7$). MI patients experienced superior post-operative recovery (Table 1). Additionally, oncologic principles were maintained as both number of R0 resections and resected lymph nodes were comparable in both cohorts ($p = 0.6$ and 0.7, respectively).

	Minimally Invasive	Open	p-value
Complications			
Open Wound	9 / 39	18 / 39	0.056
Fascial Separation	1 / 39	5 / 39	0.2
Functional			
NGT Removed on POD	1.5 ± 0.3	3.0 ± 0.3	0.002
Flatus on POD	3.1 ± 0.2	4.2 ± 0.3	0.002
Bowel Movement on POD	4.0 ± 0.3	5.5 ± 0.3	0.003
Regular Diet on POD	4.8 ± 0.4	6.1 ± 0.5	0.03
Length of Stay	9.6 ± 2.1	16.0 ± 2.9	0.07
ICU Length of Stay	0.7	3.0	0.03
Oncologic			
R0 Resections	38 / 39	36 / 39	0.6
Resected Lymph Nodes	21 ± 2	20 ± 2	0.7

Table 1.

Conclusions: Establishing a minimally invasive colorectal program at a Veterans' Affairs tertiary care center leads to enhanced patient care, lower complication rates, faster return to bowel function, and shorter hospital stays while preserving oncologic principles and safe practice. Based on this experience, minimally invasive approaches have become our new standard of care for most patients with colorectal cancer.