LOS ANGELES

COLON AND RECTAL SURGICAL ASSOCIATES, INC.

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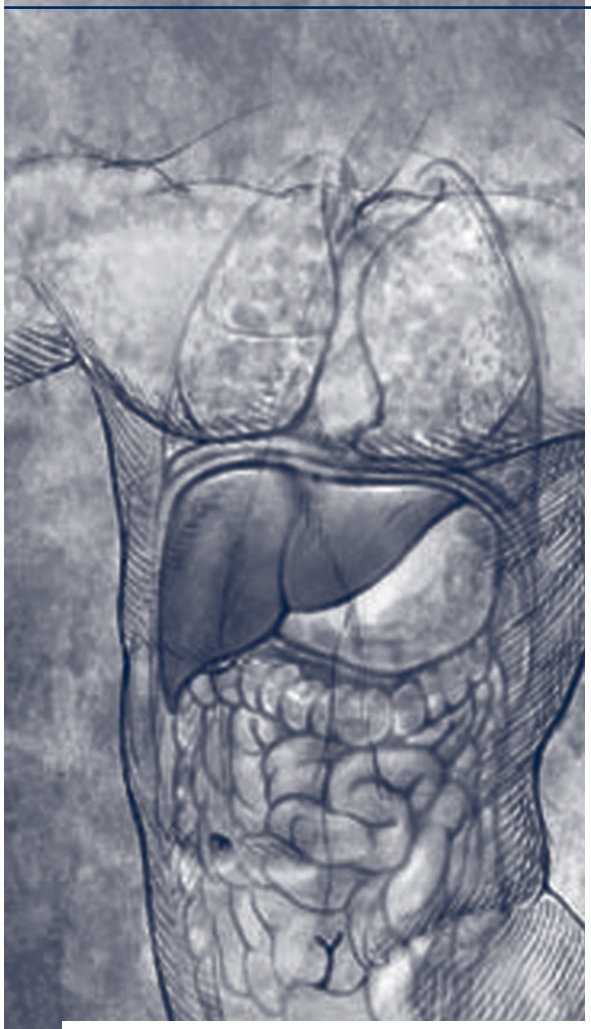

Laparoscopic Colon and Rectal Resection for Colorectal Cancer

IS IT SAFE?

IS IT AN IMPROVEMENT OVER TRADITIONAL OPEN TECHNIQUES?

Minimally invasive surgical techniques have gained popularity in the treatment of many benign diseases. However, there have been concerns surrounding the laparoscopic approach in the removal of colorectal carcinomas. Recently, these questions have been addressed in well controlled, prospective, randomized studies.

An adequate colorectal cancer resection is defined as the complete removal of the tumor, the associated mesentery and the contiguous lymph node basin. Many randomized studies have compared the open and laparoscopic techniques with respect to the adequacy of the operation. No differences have been found.(1)

Several early reports appeared which described tumor recurrences at the laparoscopic trocar placement sites. It was theorized that these recurrences occurred secondary to tumor shedding or tumor implantation due to elevated intra-abdominal CO_2 pressures. Accelerated tumor growth was also postulated. However, multiple long-term studies involving more than 2,600 patients have found the rate of port-site metastases to be approximately 1%. This rate was similar to incisional metastases noted in patients treated with traditional, open resections. It is no longer believed that laparoscopic colectomy for malignant disease is associated with a higher than expected port-site recurrence rate.(2)

Recently, a well-conducted multicenter prospective, randomized study comparing laparoscopic colon resection with open colon resection for malignant disease was published in the May 2004 issue of The New England Journal of Medicine. Patients were followed for a median time of four years. Recurrence rates were found to be similar between the two groups. This study found that in those patients undergoing a laparoscopic resection, there was a briefer

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period of use of parenteral narcotics or oral analgesics. Additionally, hospital stays were significantly shorter. The overall adequacy of the oncologic resection in the laparoscopic resection group was determined to be equivalent to the adequacy of an open resection.(3)

The benefits of minimally invasive resective techniques for colorectal cancer are similar to those benefits seen in the laparoscopic treatment of benign disease. The benefits arise from there being less operative trauma to the tissues when using laparoscopic techniques. Patients undergoing a laparoscopic colectomy resume an oral diet earlier in the postoperative period than those patients undergoing a traditional open colectomy.(4) An early return to a normal diet is secondary to a shorter postoperative ileus. This shorter ileus is attributed to more gentle intraoperative bowel manipulation, and decreased postoperative narcotic usage.

Additionally, several studies have noted a lower complication rate with the minimally invasive approach when compared with an open technique.(5) The underlying reasons for this may be related to a quicker return of preoperative pulmonary function(6), less operative blood loss(7), or a decreased overall systemic inflammatory response.(8)

Most studies have reported a 30 to 75 minute increase in the operative time using the minimally invasive approach.(2,4,6) Surgical experience helps to shorten the operative time. However, the procedure is associated with a significant learning curve.

With appropriate surgical training, education and increased surgeon experience, the use of laparoscopic resections in the treatment of colorectal malignancies is on its way toward becoming a standard approach in the surgical armamentarium. Once the learning curve is mastered, the approach seems to offer the advantage of a quicker, and less painful postoperative recovery time.

CONCLUSION

We believe that with continued favorable experience, laparoscopic colectomy for the treatment of colorectal malignancies should become a standard technique in the treatment of colon neoplasms.

TIP

A common misconception among patients is that the regular use of soap will enhance perineal hygiene. In fact, the use of soap is one of the most common causes of pruritus ani and various other annoying symptoms. Even “mild” or “baby” soaps may cause symptoms.

We advise our patients to permanently discontinue the use of all soap based products and use only water for perineal hygiene.

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