Letters to the editor

Surgical Endoscopy

Surg Endosc (1997) 11: 875–876

Laparoscopic colectomy

We read with great interest the papers of the SAGES Postgraduate Course published in the December 1995 issue of *Surgical Endoscopy*, and we find that we cannot agree with some statements made by D.M. Ota in his work, ''Laparoscopic colon resection for cancer.''

The author describes the basic principles of colorectal cancer management in open and laparoscopic surgery. We do agree with Ota that the laparoscopic procedures should reproduce the principles of open surgery. Nevertheless, Ota says that it is not possible to accomplish a complete staging of the disease through the laparoscopic approach and that, therefore, retroperitoneal and periportal adenopathy can be missed.

Ota also states that ''early ligation of regional blood vessels is not feasible during laparoscopic colectomy'' and that anterior resection is also not feasible ''because the laparoscopic intestinal stapler is straight and the stapled suture line can only be 10–12 cm from the anal verge.'' We do not want to discuss whether radical hemicolectomy is preferable to segmental colectomy for cancer treatment since this is an open question and the assertions made by the author in this respect are not arguable. But we would like to assert some technical principles which totally differ from those affirmed by Ota.

1. The identification of metastatic disease is certainly time consuming but at the same time extremely precise by laparoscopy. As far as the periportal nodes are concerned, during laparoscopic hepatectomy and laparoscopic D2 gastrectomy it has been demonstrated that it is possible to visualize and dissect the element of the hepatoduodenal ligament, carrying out the dissection of the group of nodes #12 according to the JSCC classification [3]. As far as lumbar and aortic node dissection is concerned, it has been demonstrated that this is feasible in colorectal cancer, cancer of the testis, and cervical, endometrial, and ovarian cancer [2]. In our experience (165 laparoscopic colorectal resections out of 250 laparoscopic colectomies, 101 of which for cancer), in 12 cases an extended lymphadenectomy, including infraaortic node dissection, iliac, hypogastric, and obturatory node dissection have been performed. Intraoperative complications and postoperative morbidity and mortality were similar to those of open operations. In one case, a lesion of the aorta occurred during the disection due to the detachment of the left ovarian artery at its origin. The lesion was immediately repaired without any need of conversion.

2. The early ligature of the inferior mesenteric vessels is a basic step and the key element of laparoscopic colorectal procedures. Such a maneuver is not only doable (Fig. 1) but makes even easier the accomplishment of the operation since the preparation of the inferior mesenteric artery at its origin is carried out along an avascular plane and the dissection of the mesentery without previous colonic mobilization allows a clear visualization of the gonadic vessels, the ureter, and the genitofemoral nerve [1]. In this way the procedure is safer, quicker, and oncologically correct: Only two ligatures are required! The high ligature (the ligature and division of the artery are performed close to its origin from the aorta) of the mesenteric vessels is performed by us as the first step of a colorectal resection; thus, a ''no-touch'' procedure is accomplished. In our opinion this does not increase patient survival, but it does allow a precise staging of the disease, which is essential for postoperative adjuvant chemotherapy.

3. Very low anastomoses (Fig. 2), even coloanal or ileoanal anastomoses, are performed using one of the following techniques:

a. Double linear endostapler application with instrument loaded with the 30-mm- or 35-mm-long cartridges and inserted through the cannula placed in the right inferior quadrant, while the rectum is pulled toward the left and a pressure is applied on the perineum to push upward the elevator-muscles plane.

b. Application of a standard roticulator stapler through a suprapubic minilaparotomy, with the operation continued with a gasless technique.

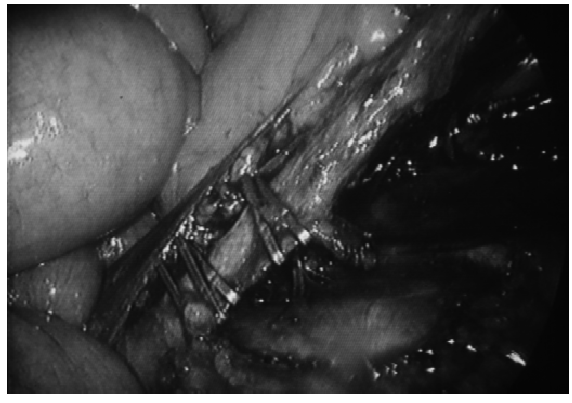

Fig. 1. High division of inferior mesenteric artery is achieved after either ligating or clipping (two large clips 12 mm long, each side) the vessel at its origin from the aorta.

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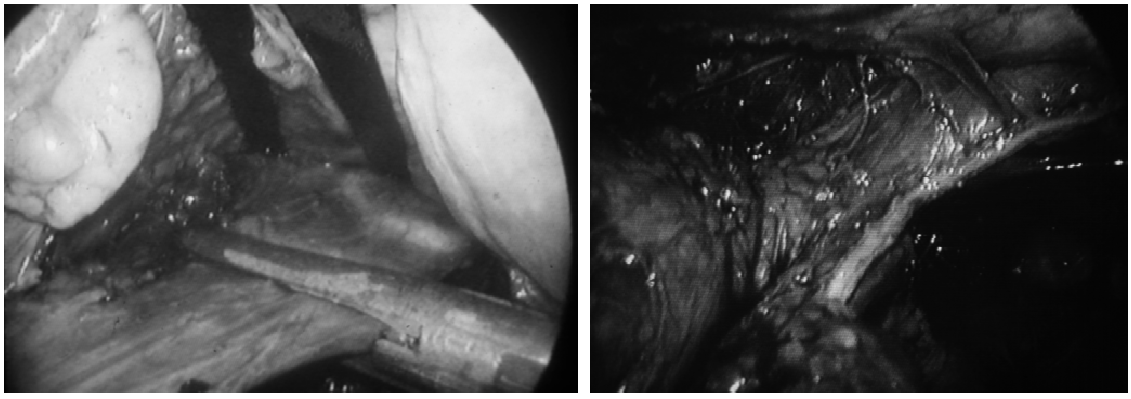

Fig. 2. Multiple applications of linear endostapler with the described technique allow a very low division of the rectum (the line of transection, below the peritoneal reflection, is brought down to the inferior third of the rectum) and performance of very low colorectal anastomoses and coloanal or ileoanal anastomoses according to the double stapling procedure.

In both cases the anastomosis is then accomplished according to the double stapling technique. In 20 cases of very low anastomoses performed through the laparoscopic approach, we found no technical difference compared to open surgery. On the contrary, the dissection of mesorectum seems to be more accurate by the laparoscopic route.

Laparoscopic colorectal procedures can really reproduce the techniques performed in open surgery: They should be considered a surgical option for that reason—not because radical operations have not shown real advantages compared to segmental colonic resections.

References

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