

脾彎曲部結腸癌に対する外科療法

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Introduction

Carcinoma of the splenic flexure is uncommon and is associated with a high risk of obstruction and a poor prognosis.¹⁻³⁾ Some authors recommend extended surgery, meaning extended right hemicolectomy, splenectomy and distal pancreatectomy, to improve the survival in splenic flexure cancer.^{1,4)} Because the carcinoma at this site has dual lymphatic drainage of the superior and inferior mesenteric vessels, the extended right hemicolectomy can remove involved lymph nodes along both vessels.^{1,4)} An additional rationale for extended surgery is that the splenic flexure has direct lymphatic drainage to the hilum of the spleen and along the tail of the pancreas.⁵⁾ However, whether such extended surgery is necessary to improve the prognosis in splenic flexure cancer is controversial.^{1~4,6)} This study reviews our experience with carcinoma at this site and discusses the problems associated with the selection of the appropriate operative procedure for splenic flexure cancer.

Patients and Methods

Between 1982 and 1998, 840 patients with a single primary adenocarcinoma of the colon underwent a curative resection. The splenic flexure was defined as the junction of the distal third of the transverse colon with the first part of the descending colon.^{1,2)}

Results

Of 840 patients, 27 (3.2%) had carcinoma of the splenic flexure. The 6 patients (6/27; 22.2%) who had

colonic obstruction on admission underwent urgent surgery. One of these patients died in the immediate postoperative period. Four of these 6 patients underwent single-stage left partial colectomy and two had two-stage left partial colectomy concurrent with fecal diversion. Twenty-one patients (21/27; 77.8%) had elective surgery: single-stage left partial colectomy in 14 and single-stage partial resection of transverse colon/descending colon in 7. There was no operative death in this group. In this series, no patient underwent extended right hemicolectomy.

Three patients (3/27; 11.1%) underwent combined resection concurrent with the surgery because of tumor adherence to adjacent organs. A total of 6 organs (2 spleens, 2 distal pancreases, 1 diaphragm, and 1 stomach) were resected. Seven patients (7/27; 25.9%) had lymph node metastasis. No metastasis was histologically revealed in lymph nodes at the splenic hilum and along the tail of the pancreas and at the root of the inferior mesenteric artery and middle colic artery.

There was no significant difference in stage between the splenic flexure cancers and colon cancers at other sites ($P=0.45$). There was also no significant difference in 5-year survival between patients with splenic flexure cancers and those with colon cancers at other sites. Three patients with splenic flexure cancers developed hematogenous metastases in liver, spleen and lung and no patient developed local recurrence.

Discussion

Blood to the splenic flexure is supplied by the inferior mesenteric artery via the left colic artery in 89% of cases and by the superior mesenteric artery via the middle colic artery in 11%.⁷⁾ Anatomic studies of lymphatic drainage of the splenic flexure have demonstrated direct lymphatic drainage to the hilum of the spleen and along the tail of the pancreas.⁵⁾

Based on the present results, we feel that routine extended resection, extended right hemicolectomy, splenectomy and distal pancreatectomy, may be unnecessary to achieve cure of splenic flexure cancer. Only when splenic flexure carcinoma presents severe obstruction may extended right hemicolectomy be indicated to avoid anastomotic complications. Splenec-

tomy and distal pancreatectomy should be performed if carcinoma is adherent to the spleen and distal pancreas, respectively.

References

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Surgical treatment and subsequent outcome in carcinoma of the splenic flexure

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To discuss the problems associated with selection of the operative procedure for cure of splenic flexure cancers, we conducted a retrospective review of surgical procedures and subsequent outcome in 27 patients with splenic flexure cancer who underwent curative resection without extended resection (extended right hemicolectomy or splenectomy/distal pancreatectomy). There was no significant difference in 5-year survival between patients with splenic flexure cancers and those with colon cancers at other sites. No patient developed local recurrence. We are of the opinion that routine extended resection may be unnecessary to achieve cure of splenic flexure cancer.

Key words: splenic flexure, colon cancers, extended resection