Locally advanced colorectal cancers, which are defined as tumors that remain localized and/or invade adjacent organs before distant metastasis occurs, constitute approximately 5-22% of all colorectal cancers at the time of presentation. Depending on the site, primary colorectal cancers may lead to perforation or invasion of adjacent organs such as the stomach, duodenum, upper jejunum, pancreas, abdominal wall, uterus, cervix, and urinary bladder. These advanced tumors are usually bulky but diagnosis is sometimes delayed because of the vagueness of their symptoms. Despite the development of advanced chemotherapy, radical surgical resection remains the only potentially curative treatment for these advanced colorectal cancers. Radiation and/or chemotherapy can rarely cure patients with unresected or incomplete resected colon cancer. However, surgeons sometimes need to weigh the potential benefit of extensive resections against the increased risk of morbidity and mortality with these operations.

Lai et al. published their paper in this issue (page 135-140), entitled En bloc resection of pancreaticoduodenectomy and colectomy in patients with locally advanced right colon cancer. In this study, they retrospectively reviewed their experience with locally advanced primary hepatic flexure and transverse colon cancers in an attempt to justify extensive resection on the basis of prognosis. They reported 11 patients over a 20-year period who had undergone en bloc pancreaticoduodenectomy and colectomy for right colon cancer invading the duodenum or pancreas. The median disease-free survival was good (mean, 20.3 months) and 4 of 11 patients survived longer than 5 years. They thus concluded that pancreaticoduodenectomy should be justified for this disease.
Although I agree with the authors’ conclusions, there are several issues that need to be further addressed. First, the N0 or N1 cases in this study showed better survival than the N2 cases, which is comparable with previous studies. Lymph node metastasis has been identified as a poor prognostic factor in many previous reports, while locally advanced tumor is another significant factor. 

Eisenberg pointed out that lymph node metastasis is the most important prognostic factor in this disease; he found 5-year survival of 76% in patients without lymph node metastasis and 0% in patients with lymph node metastasis. In this study, patients with locally advanced tumor could have achieved longer survival after curative resection if the staging was not late.

Second, it is usually difficult to intraoperatively distinguish between benign inflammatory adhesion and true malignant invasion. Some reports suggested that all adhesions between the carcinoma and adjacent structures should be assumed to be malignant, because 33-84% adhesions are malignant on histological examination. Biopsies and frozen sections are not routinely recommended because of a high rate of false-negative results and a high risk of tumor exfoliation and dissemination. Therefore, extended resection is the best choice for patients without considerable morbidity and mortality risk and without signs of distant metastasis. However, such operations in patients who are older or who have extensive comorbidities must be weighed against the potential survival benefit. The benefit of extensive surgery for local advanced tumor should thus be carefully weighed against its potential complications. Gall et al. demonstrated an increase in intraoperative mortality in patients with tumor infiltration to adjacent organs who underwent en bloc resection compared with patients treated with standard colectomy (12% vs. 6%). The operative mortality rate in Lai’s study is lower than in the reported series. Surgical complications and postoperative mortality rates were below reported values, illustrating that extensive surgery can be well tolerated if patients are carefully selected.

Third, for clinically suspect N0 cases, the benefit of extensive resection as compared with local excision — if possible with primary repair — needs to be further clarified. In our previous study, we demonstrated that radical resection will result in an overall 5-year survival rate of 47.3% for patients who present with locally advanced transverse colon cancers. However, some tumor characteristics such as mucinous/signet ring cell or poorly differentiated adenocarcinoma are significantly related to locally advanced tumor and exhibit a poor prognosis well.

In conclusion, although morbidity and mortality were higher in the locally advanced group, the benefit of extensive surgery for that group cannot be underestimated. The benefit is even clearer in the stage II tumor group, because they demonstrated significantly higher overall survival rate even with locally advanced tumors.

References

6. Rowe VL, Frost DB, Huang S. Extended resection for


