Evaluation of Risk Factors for Metachronous Liver and Lung Metastasis in Colorectal Carcinoma

Seiichiro Hoshino, Yasushi Yamauchi, Kouji Mikami, Tetsuo Shinohara, Tomoaki Noritomi, Takafumi Maekawa and Yuuichi Yamashita

Department of Gastroenterological Surgery, Fukuoka University School of Medicine 7-45-1, Nanakuma, Jonan-ku, Fukuoka, Japan 814-0180

Abstract: Hepatic and lung recurrences are major determinants of survival for patients who have undergone a curative resection for colorectal carcinoma. The aim of this study was to assess the risk factors of metachronous liver and lung metastases from colorectal carcinoma. Method: From January 1991 to April 2000, 705 patients with histologically confirmed adenocarcinoma of the colorectum and who had been operated on at our institution were retrospectively evaluated for this study. We investigated the risk factors of metachronous liver and lung metastases from colorectal carcinoma. Results: According to a univariate analysis, lymph node metastasis, depth of invasion, and extramural lymphatic invasion were found to have a significant influence on the incidence of metachronous liver metastasis. Based on a multivariate logistic analysis, lymph node metastasis proved to be an independent recurrent factor. On the other hand, a univariate analysis showed lymph node metastasis, depth of invasion, and extramural lymphatic invasion to have a significant influence on lung metastasis. On multivariate logistic analysis, lymph node metastasis and lymphatic invasion proved to be independent recurrent factors. Conclusions: Patients with not only positive results for lymph nodes metastasis but also positive results for lymphatic invasion should therefore be carefully followed and will likely be good candidates for postoperative adjuvant chemotherapy.

Key words: Risk factors, Colon cancer, Metachronous liver metastasis, Metachronous lung metastasis