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Liver metastases from gastric carcinoma: A Case report and review of the literature

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ABSTRACT

Gastric carcinoma (GC) is the fifth most common malignancy worldwide but the third leading cause of cancer death, and surgery remains the only curative treatment option. Prognosis of patients with liver metastases from gastric carcinoma (LMGC) is poor, and the optimal treatment of metastatic gastric cancer remains a matter of debate. In 2002, a 53-year-old male patient with GC and synchronous oligometastatic lesion in liver VIII segment underwent a total gastrectomy combined with metastasectomy. The pathologic diagnosis was stage IV gastric adenocarcinoma (pT3N2M1), which was treated with adjuvant chemotherapy (cisplatin, epirubicin, leucovorin, and 5-fluorouracil). In 2012, abdominal ultrasound and percutaneous liver biopsy revealed recurrence of the metastasis in the right liver lobe. Progression of the disease was observed after palliative chemotherapy (epirubicin, oxaliplatin, and capecitabine). Nevertheless, an extended right hemihepatectomy, with excision of segments 1, 4A, 5, 6, 7, and 8, was still performed. Pathologic examination confirmed large KRAS- and HER2-negative LMGC. The patient is alive and free of disease

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47 months after the repeated hepatectomy and 13 years after removal of the primary GC and synchronous liver metastasis. Based on review of 27 articles, 5-year overall survival rate following gastrectomy and liver metastasectomy may reach 60%, with median survival time up to 74 months. Although the combination of aggressive surgical approach with systemic therapy for LMGC is controversial, it may allow favorable outcome. Careful selection of patients based on evaluable predictive factors for R0 surgical resection of both primary tumor and liver metastases can lead to cure, as shown in our case presentation, where a 10-year relapse-free survival was observed, followed by successful repeated hepatectomy due to liver metastases.

Introduction

Gastric carcinoma (GC) is the fifth most common malignancy worldwide but the third leading cause of cancer death, and surgery remains the only curative treatment option.[1] Despite the decline in incidence and mortality rate of GC in many countries, in Poland in 2010 both incidence and mortality (male population) were higher than average for the countries of the European Union.[2] An overall prognosis of patients with GC with distant metastases remains poor, and the adequate management of patients with liver metastases from gastric carcinoma (LMGC) remains controversial.

Current evidence from randomized controlled (REGATTA) trial on the treatment of metastatic GC indicates that patients have no survival benefit from limited surgery as compared to chemotherapy alone.[3] Thus, in patients with advanced and incurable disease, systemic treatment is recommended as the standard therapy. An ongoing randomized GYMSSA trial compares gastrectomy with metastasectomy followed by systemic treatment vs systemic therapy alone in advanced GC.[4] This extensive surgical approach of removing all cancer deposits contrasts with the REGATTA trial design, in which patients underwent only limited (palliative and cytoreductive) surgery (D1 gastrectomy) without metastasectomy.

This report describes a patient with synchronous LMGC after gastrectomy and metastasectomy with a 10-year relapse-free survival, followed by successful repeated hepatectomy due to liver metastases. In addition, the review of the recent literature on this controversial topic has been presented.

Case report

A 53-year-old male patient was first hospitalized in February 2002 following diagnosis of gastric adenocarcinoma with a small (2 cm in diameter) metastatic lesion in segment 8 of the right liver lobe. The treatment included total gastrectomy with metastasectomy, and the pathologic diagnosis was stage IV gastric adenocarcinoma (pT3N2M1). Adjuvant chemotherapy was administered from March-May 2002, comprising 3 courses of cisplatin, epirubicin, leucovorin, and 5-fluorouracil regimen are as follows: cisplatin 40 mg/m² intravenously on days 1 and 5, epirubicin 30 mg/m² intravenously on days 1 and 5, leucovorin 100 mg/m² intravenously on days 1-4, and 5-fluorouracil 300 mg/m² intravenously on days 1-4, regimen repeated every 3 weeks.

The patient remained free of disease for over a decade but was hospitalized several times because of sickle cell anemia in October 2002. Subsequently, the patient developed