

Review

The role of hepatectomy in the management of metastatic gastric adenocarcinoma: A systematic review



Nathan Grimes^{a, *}, Joanne Devlin^b, Declan F.J. Dunne^c, Graeme Poston^c,
Stephen Fenwick^c, Hassan Malik^c

^a Royal Victoria Hospital, Belfast, Northern Ireland, BT12 6BA, United Kingdom

^b Altnagelvin Area Hospital, Derry, Northern Ireland, BT47 6SB, United Kingdom

^c Liverpool Hepatobiliary Centre, University Hospital Aintree, Liverpool, L9 7AL, United Kingdom

ARTICLE INFO

Article history:

Accepted 2 August 2014

Keywords:

Gastric cancer

Metastatic gastric cancer

Hepatectomy

ABSTRACT

Background: Gastric cancer has a high mortality, with many patients presenting with advanced disease. Many patients who undergo curative gastrectomy will subsequently develop metastatic disease. Hepatectomy has an established place in treating metastases from a variety of cancers but its role in gastric cancer is not clear. This review sought to systematically appraise the literature to establish the role of hepatectomy in treating gastric cancer metastases.

Method: Medline and EMBASE were searched for all papers publishing data on survival of patients with metastatic gastric adenocarcinoma who underwent hepatectomy.

Results: Seventeen studies with 438 patients were included. There were no randomised controlled trials. Perioperative mortality was 2%, with morbidity between 17 and 60%. Patients with solitary metastases appeared to have better survival. Other favourable survival characteristics included unilobar disease, and metachronous presentation. No advantage was demonstrated with either adjuvant or neoadjuvant chemotherapy.

Discussion: Few patients with hepatic metastases from gastric cancer are suitable for hepatectomy, but for those suitable there appears to be survival benefit. Patients with synchronous, multiple or bilobar metastases have worse survival.

Conclusion: The evidence supporting the role of hepatectomy in the treatment of hepatic metastases from gastric cancer is weak. However in a selected group there appears to be a survival advantage; patients with solitary metastases had better survival outcomes than those with multiple metastases and metachronous presentation was associated with a better prognosis than synchronous presentation. Hepatectomy should be considered in these patients in the setting of a randomised trial.

© 2014 Elsevier Ltd. All rights reserved.

Contents

Introduction	178
Methods	178
Inclusion criteria	178
Exclusion criteria	178
Results	178
Patient demographics	179
Hepatectomy criteria	179
Neoadjuvant and adjuvant therapy	180
Surgical resection	180
Morbidity and mortality	180

* Corresponding author. Tel.: +44 2890 240503.

E-mail address: nggrimes@doctors.net.uk (N. Grimes).

Survival	180
Patient related prognostic factors	180
Disease related prognostication	180
Discussion	182
Conclusion	184
Funding	184
Conflict of interest statement	184
Authorship statement	184
Acknowledgements	184
References	185

Introduction

Hepatectomy is an established treatment for hepatic metastases from a variety of primary tumours, however its role in gastric cancer is controversial [1–3]. Gastric cancer is the fourth commonest malignancy worldwide, with a global annual incidence of approximately one million. It is the second leading cause of cancer-death in men and fourth leading cause in women [4]. In part, the high mortality is attributed to the typically advanced stage of disease at presentation with approximately one third of patients presenting with metastatic disease [5,6]. Hepatic metastases are present in 4–14% of patients at diagnosis [7,8]. Furthermore, in patients who present with local disease and undergo curative resection, the development of metastases is common, with the hepatic metastases the commonest site of recurrence, occurring in over one third of patients [9–12]. For patients with metastatic disease, palliative chemotherapy provides the mainstay of treatment. There have been several chemotherapy regimens described in the literature for treatment of metastatic disease, but there is currently no consensus as to which regimen provides the best response. Even with systemic chemotherapy, prognosis is poor, with median survival being reported as 5.7–11.2 months, regardless of chemotherapy regimen [13–15]. More recently, there has been evidence suggesting a role of biological agents in the treatment of metastatic disease, and this has been reflected in the National Institute for Health and Clinical Excellence guidelines recommending the use of trastuzumab in selected patients [16].

Hepatectomy is an established treatment modality for some hepatic metastases, including colorectal, breast, ocular melanoma and neuroendocrine tumours [1–3]. In colorectal cancer, advancing surgical technique and improved chemotherapeutics have led to a 5-year survival approaching 50% in patients undergoing hepatectomy. This improvement has led to guidance suggesting all patients with liver limited colorectal metastases undergo review by a liver surgeon [1]. There have been several reports of hepatectomy being performed for gastric metastases, but the question of which patients should be offered hepatectomy and what the exact survival benefits of this are remains unclear [17,18]. This study sought to systematically evaluate the literature to establish the role of hepatectomy in treating liver metastases from gastric cancer.

Methods

A search of Medline and EMBASE databases was carried out on 01/07/2013. All references from 1993 to 2013 were potentially eligible for inclusion in the study. The search terms used were “cancer OR malignant OR malignancy OR neoplasm OR neoplastic”, “liver OR hepatic”, “metastatic OR metastases OR metastasis OR secondary OR secondaries”, “surgery OR resection OR hepatectomy OR hepatectomies OR segmentectomy OR segmentectomies OR metastasectomy OR metastasectomies” and “stomach OR gastric”.

Title search was conducted with title review of all identified references, with studies deemed unrelated to study aims on single author title review excluded. Abstracts for the remaining studies were retrieved and were independently assessed for eligibility by two authors. Full papers were retrieved for all abstracts deemed potentially eligible. Full papers underwent dual author review, and were assessed against inclusion/exclusion criteria. Where discrepancies arose between the two authors regarding eligibility, a discussion between authors was used to establish a consensus.

Inclusion criteria

- Paper presenting data on resected liver metastases from gastric cancer
- Original data published (e.g. not review papers)
- Survival outcome available

Exclusion criteria

- Non English language studies
- Full manuscript not available (e.g. abstracts presented at conference)
- Studies with less than ten patients
- Data on hepatic resection unavailable
- Malignancy other than adenocarcinoma

The primary outcome assessed was survival following hepatectomy. The secondary outcome measures investigated were prognostic e.g. presentation of metastases (synchronous versus metachronous metastases); extent of metastases (solitary versus multiple metastases).

Results

The original search returned 2146 papers. The consort diagram (Fig. 1) demonstrates the study search strategy. Seventeen studies were included in the final review and are summarized in Table 1

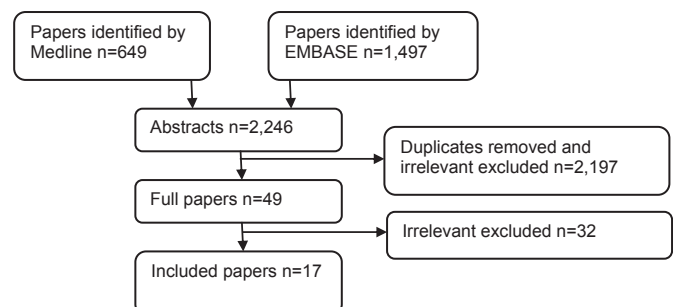


Figure 1. Diagram of how many studies were identified and excluded at each stage.

Download English Version:

<https://daneshyari.com/en/article/3997878>

Download Persian Version:

<https://daneshyari.com/article/3997878>

[Daneshyari.com](https://daneshyari.com)