

Editorial

Surgical treatment of colorectal cancer hepatic metastasis

Mark E Reeves

Department of Surgery, Loma Linda University, Loma Linda, California, USA

J Gastrointest Oncol 2012;3:1-2. DOI: 10.3978/j.issn.2078-6891.2012.009

Colorectal cancer (CRC) is the fourth most common cancer in the United States, with approximately 140,000 new cases this year. Unfortunately, it will kill almost 50,000 people this year. Far and away, the most common site of hematogenous spread is the liver. Nearly 50% of patients with CRC will eventually develop hepatic metastasis as part of their disease process.

Two decades ago, the outlook for patients with metastatic CRC was indeed bleak. Two relatively ineffective systemic chemotherapy agents (5-fluorouracil and leucovorin) were used for the majority of treatment, and surgical metastasectomy was an undeveloped field in which operative mortality was almost as high as the chance for cure.

Fortunately, that has changed. Now, there are many effective systemic chemotherapy agents for the treatment of colorectal cancer, and these significantly improve survival in various combinations in both the adjuvant and the metastatic setting. In addition, the field of surgical metastasectomy has matured significantly. This is especially true for resection of hepatic metastasis. Because of important improvements in patient selection, preoperative imaging, perioperative management, surgical techniques, and adjunctive methods, surgical treatment of colorectal cancer hepatic metastasis is now safe, reliable, and effective. For properly selected patients with liver metastasis, the combination of surgical metastasectomy with effective systemic therapy by experienced multidisciplinary teams

can result in very low morbidity and mortality, along with long-term cure rates approaching 50%.

This issue is dedicated to the surgical treatment of colorectal cancer hepatic metastasis. Experts in the field offer their perspectives about the important concepts, techniques, details, and practical “pearls” that make surgical resection of hepatic metastasis an important part of the armamentarium of the colorectal cancer disease management team.

In the first two articles, teams from the Memorial Sloan-Kettering Cancer Center will discuss two important parts of preoperative planning in preparation for hepatic resection: patient selection and preoperative imaging. In the first article, Mike D’Angelica leads us through a discussion of ways to decide whether a given patient is a good candidate for surgical resection (1). In the second article, a team led by Bill Jarnagin presents the all-important topic of preoperative imaging, and how this can be used to not only select patients, but to also plan the surgical procedure (2).

In the next three articles, groups from Emory University and Loma Linda University take us through the actual events surrounding surgery. In the third article, David Kooby talks about important perioperative considerations that make hepatic resection safe and reliable (3). Next, Naveen Solomon discusses the actual surgical techniques that are used in surgical resection, weighing the risks and benefits of each (4). In the fifth article, Magi Senthil walks us through the important points of postoperative management of liver resection patients (5).

In the last three articles, teams from Methodist Hospital, Johns Hopkins University, and Roger Williams Medical Center discuss additional topics of more complex presentations of hepatic metastasis. Bridget Fahy presents the issues and treatment options for the synchronous presentation of hepatic metastasis with the colorectal primary (6). Next, Tim Pawlik discusses the treatment approaches for patients with extrahepatic metastasis, including which patients with hepatic metastasis and limited extrahepatic disease should be considered for

No potential conflict of interest.

Corresponding to: Mark E Reeves, MD, PhD. Director, Loma Linda University Cancer Center, 11175 Campus St, CP 21108, Loma Linda, CA 92350. Tel: 909-558-3391. Email: mereeves@llu.edu.

Submitted Jan 10, 2012. Accepted for publication Jan 13, 2012.

Available at www.thejgo.org

ISSN:2078-6891

© Pioneer Bioscience Publishing Company. All rights reserved.

surgical resection (7). Finally, Joe Espot presents the topic of thermal ablation for hepatic metastasis, including how it can be used to extend options for surgical resection and its role in unresectable disease (8).

In summary, CRC with liver metastasis is a challenging problem. However, there are now safe and effective surgical options that are an important part of a multidisciplinary treatment approach that can result in long-term survival and cure.

References

1. Weiss MJ, D'Angelica MI. Patient selection for hepatic resection for metastatic colorectal cancer. *J Gastrointest Oncol* 2012;3:3-10.
2. Frankel TL, Do KG, Jarnagin WR. Preoperative imaging for hepatic resection of colorectal cancer metastasis. *J Gastrointest Oncol* 2012;3:11-18.
3. Page AJ, Kooby DA. Perioperative Management of Hepatic Resection. *J Gastrointest Oncol* 2012;3:19-27.
4. Aragon RJ, Solomon NL. Techniques of hepatic resection. *J Gastrointest Oncol* 2012;3:28-40.
5. Wrighton LJ, O'Bosky KR, Namm JP, Senthil M. Postoperative management after hepatic resection. *J Gastrointest Oncol* 2012;3:41-47.
6. Fahy BN, Fischer CP. Synchronous resection of colorectal primary and hepatic metastasis. *J Gastrointest Oncol* 2012;3:48-58.
7. Johnston FM, Kneuert PJ, Pawlik TM. Resection of non-hepatic colorectal cancer metastasis. *J Gastrointest Oncol* 2012;3:59-68.
8. Munireddy S, Katz S, Somasundar P, Espot NJ. Thermal tumor ablation therapy for colorectal cancer hepatic metastasis. *J Gastrointest Oncol* 2012;3:69-77.

Cite this article as: Reeves ME. Surgical treatment of colorectal cancer hepatic metastasis. *J Gastrointest Oncol* 2012;3:1-2. DOI: 10.3978/j.issn.2078-6891.2012.009