

Synchronous Liver Metastases from Colorectal Cancer: State of the Art

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Abstract

Colorectal cancer (CRC) is one of the most common cancers in the world and a leading cause of death. The liver is the dominant metastatic site for patients with CRC, and approximately 50% of patients develop CRC liver metastases (CRCLM) during the course of their disease. Surgical resection, when combined with chemotherapy, can achieve 5-year overall survival (OS) rates of up to 40-60% for patients with CRCLM. Despite excellent results, recurrence-free survival rates remain low as many surviving patients eventually experience recurrence. Appropriate patient selection is the key to ensure the best perioperative and long-term oncologic outcomes. Synchronous CRCLM are detected at the same time or before the diagnosis of the primary tumor. In general these patients present with a higher tumor burden, more extensive liver disease, and a more aggressive presentation. The 5-year OS rate in patients with synchronous CRCLM is around 40%, and specific approaches for the decision-making process are mandatory according to the tumor status and resectability at both organ sites. When appropriate and technically feasible, the simultaneous surgical resection approach to synchronous CRCLM should be preferred as it is safe and effective and provides for substantial financial cost savings. Neoadjuvant chemotherapy should be used with precaution, since it can result in lesions "disappearing" or becoming imaging occult. Moreover, the risk of operative morbidity increases with the number of prior chemotherapy cycles. A short period of conversion chemotherapy is recommended, and multidisciplinary discussions of the treatment strategy should be scheduled every two months. An individualized and patient-tailored multidisciplinary approach is mandatory, when trying to define the best treatment of synchronous CRCLM.

Key words: colorectal cancer, liver metastases, liver surgery, hepatectomy