

Surgical Options in Synchronous Liver Metastases from Colorectal Cancer

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Abstract

Currently, the treatment of liver metastases of colorectal cancer (CRC) requires a multidisciplinary approach and should be individualized for each patient. Liver resection provides 5 years survival rates ranging between 30 and 58% in patients with liver metastases of CRC. The optimal timing of liver resection, resection of the primary tumor and neoadjuvant chemotherapy has not been fully established, yet, neither for initially resectable synchronous liver metastases, nor for those initially unresectable which could be converted to resectability. Advocates of simultaneous resection and those of staged resection (delayed liver resection or "liver first approach"), both presented theoretical arguments in favor of each of these therapeutic strategies. Progresses in liver surgery, anesthesia, intensive care and oncology caused a paradigm shift regarding the approach of synchronous colorectal liver metastases, with simultaneous resection (SR) becoming a safer procedure in the last decade. As well, the oncologic outcomes of SR are similar to those achieved by staged resection. In this review we present the literature data concerning the results achieved by each of the currently available therapeutic approaches.

Abbreviations: CLMs – colorectal liver metastases, SCLMs – synchronous colorectal liver metastases, CRC – colorectal cancer, PVL- portal vein ligation, PVE – portal vein embolization, SR – simultaneous resection, DR – delayed liver resection, SgR – staged resections, FLR – future liver remnant, CHT – chemotherapy, OS – overall survival, DFS – disease-free survival, ETS – early tumor shrinkage

Key words: colorectal liver metastases, simultaneous resection, delayed resection, "liver-first" approach, initially unresectable liver metastases