IS THERE A ROLE FOR INTRA-ARTERIAL THERAPY OR ISOLATED LIVER PERFUSION?

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The liver is the most common visceral site of colorectal cancer (CRC) metastasis and recurrence. Approximately 25% of CRC patients present with synchronous hepatic metastases at time of initial diagnosis, and further 50% will develop metachronous metastases during the course of their illness. Unfortunately, only 25% of patients with hepatic CRC metastases are suitable for R0 resection at time of diagnosis or after chemotherapy.

Intra-arterial locoregional therapies are evolving tools in the management of CRC liver metastases. Although these therapies were initially used for salvage and palliation, they are becoming therapeutic options earlier in the course of disease in selected populations, to increase the rate of curative surgical resection, and to improve survival and quality of life.

Furthermore, intra-arterial therapies may serve as viable first-line treatments for the large majority of patients who present with unresectable liver metastases, and as neoadjuvant chemotherapy prior to hepatectomy to minimize systemic effects.

Hyperthermic isolated liver perfusion (HILP) has also been proposed by some groups as a mean to treat patients with unresectable liver metastases. Significant anti-tumoral effect has been demonstrated but HILP is a complicated procedure with a high morbidity.

There remains a lack of robust, prospective randomized data for fair and balanced comparisons to be made between locoregional and modern systemic therapeutic modalities, as well as between locoregional therapies. Future RCTs addressing overall patient survival, tumor response and toxicity are required before any of these locoregional intra-arterial treatments can be definitively recommended as the standard of care for hepatic colorectal liver mestastases. At the CHU of Liege, intra-arterial chemotherapy is now the usual way of administrating chemotherapy in patients with multiple CRC metastases limited to the liver,

before or after R0 liver resection.