

Chairman's introduction

For a long period, patients with liver metastases from colorectal cancer were considered incurable.

Things have changed: we know that chemotherapy is better than symptomatic treatment alone; and chemotherapy has become the standard treatment for most patients with colorectal liver metastases. Although patients cannot be cured with chemotherapy alone, median survival has increased from less than one year in untreated patients to 18 months or more in recent trials with multi-drug chemotherapy using irinotecan and oxaliplatin. New routes of administration have been tested, including intra-arterial, intra-portal, and intra-peritoneal. Surgeons started to resect solitary liver metastases 50 years ago. Many large series of liver resection for metastatic colon cancer have been published. In the beginning, only solitary metastases were resected. Progressively, indications have been extended to larger tumours, to multiple unilobar or bilobar metastases, and to associated hepatic and extra-hepatic deposits as long as they could be entirely removed. Operative mortality has come down to well below 5%, and 25% to 35% of patients survive 5 years after complete resection of metastases.

Progress in treatment has been made possible by new and better imaging methods including ultrasound, helical computerised axial tomography (CAT) scan, magnetic resonance imaging (MRI), intra-operative ultrasound, and positron emission tomography (PET) scan. Characteristics of tumour deposits can now be more precisely determined allowing a better selection of candidates for each type of treatment.

Radiologists can also directly contribute to treatment. New methods of ablation of liver metastases have been developed in recent years, such as cryotherapy, radio-frequency ablation, and laser hyperther-

mia. They are widely used by surgeons and interventional radiologists. They can efficiently destroy liver metastases in selected patients, but their impact on survival is not yet known. Comparison of these techniques with surgical resection, and determination of the potential benefit with chemotherapy in unresectable metastases, deserve further evaluation.

Unfortunately, recurrences occur in many patients after surgery. Combining surgery with chemotherapy may reduce this risk. A few randomised studies have evaluated the potential benefit of adjuvant chemotherapy. Some have used intra-hepatic arterial infusion, others systemic chemotherapy. Although most of these studies do not have sufficient power nor do they allow one to draw strong conclusions, there is a trend towards an improved survival after administration of chemotherapy.

Since these trials were designed, chemotherapy has evolved. New drugs allow more effective combinations and it is likely that in the near future, combined surgery and chemotherapy will be validated as the best treatment of resectable liver metastases. Meanwhile, surgical resection without administration of chemotherapy remains a good option.

Metastases considered to be resectable are not the only ones that can benefit from combining chemotherapy and surgery. Shrinkage of tumours after administration of chemotherapy may permit resection of some metastases initially considered unresectable.

The treatment profile of liver metastases is thus changing. Important progress is being made. The objective of this section is to focus on this progress.

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