Liver metastases of colon cancer

Ruiz Casado and Pereira in this issue of the “Oncología”¹ reviews extensively all the new aspects of therapy of metastatic colorectal cancer. A first comment is that it is written by a medical oncologist and a surgeon. This is yet representative of the real multidisciplinary approach that has emerged in recent years in the treatment of metastatic colorectal cancer.

Some years ago, little collaboration existed between oncologists and surgeons. Medical oncologists were in charge of 90% of patients and treated them with poorly efficient drugs resulting in a short-term palliative approach. Surgeons treated 10% of patients with a hope of long term survival but with a non neglectable risk of mortality and morbidity... Results have improved both for chemotherapy and surgery, resulting not only into increased survival in both groups but mainly into a synergy of benefits for the patients, that has lead to a dramatic change in the outcome.

The article emphasizes the key-points of this revolution.

Improvement of surgical results is documented with decreasing mortality rates. Achieving hepatic resection is now possible with a perioperative mortality of 0-2%.

Considerable Changes have occurred within the concept of resectability

Some years ago, resection was only considered in patients with no more than 3 unilobar metastases, preferably presenting metachronously, resectable with a tumor margin > 1 cm, in the absence of any extrahepatic tumor²... The authors well show that all these contraindications have been progressively abandoned. The modern definition of resectability with curative intent is the ability of the surgeon to clear all measurable disease from the liver providing the future remnant liver (FRL) is between 20-30% of healthy liver volume at presentation³. Nonetheless definition of unresectability could still remains different from one institution to an other in relation to surgical expertise and experience, and to the subjective approach of the risk-to-benefit ratio of hepatic resection for a given patient.

This absence of consensus on the definition of unresectability clearly impacts the wide range of conversion of patients from unresectable to resectable (15-45%), after downstaging chemotherapy, in various series⁴⁻¹⁰.

Increasing efficacy of chemotherapy

While «old» chemotherapy using 5-fluorouracil (5-Fu) and leucovorin could achieve a measurable response in only 20% of patients, the combination of 5-Fu to more efficient drugs such as oxaliplatin or irinotecan has improved response rate to over 50% and median survival from 8 months with best supportive care to little over 20 months.

As a consequence, patients initially deemed non resectable have been switched to resectable and submitted to «rescue» surgery^{4, 5}. The long-term results of this approach very close from that of primarily operated patients⁹ is probably one of the major changes occurred in the recent years. Combination of effective chemotherapy with surgery opens a perspective of cure to patients up to now treated only on a palliative setting... In addition, there is little doubt that new biotherapies such as cetuximab and bevacizumab will probably amplify soon the possibility of secondary surgery in patients initially considered as unresectable...

However, as stressed by the authors, the increasing cost of new drugs should be balanced with the real improvement that they provide to the patients. The authors also mention another tendency related to the higher efficacy of chemotherapy: the policy to consider chemotherapy as a first-line treatment for all the patients, including those with resectable metastases. Evidence based data do not support this policy and whereas neoadjuvant chemotherapy has proved efficacy in patients with multinodular metastases¹¹, the gold standard still remains primary liver resection in patients with limited resectable disease. This attitude is still justified by the potential toxicity that systemic chemotherapy may have on the hepatic parenchyma .

Emerging procedures to improve resectability (portal embolization, liver resection combined with radio-frequency, Two-stage hepatectomy) have also emerged recently, adding their effects to that of neoadjuvant chemotherapy for improving resectability.

In summary, the present results of this constantly evolving panorama is that it is no more conceivable that a patient with metastatic colorectal cancer could be managed by a single specialist. The concept of multidisciplinary «oncosurgical» management of these patients has been translated into practice and has become an obligation as recently pointed out by the 2003 French Conference on recommendations for the treatment of colorectal liver metastases¹². By this way, oncologists and surgeons are able to provide their combined treatment improvements to each patient, for an optimized outcome.

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