

Surgical Approach for Metastatic Liver Cancer – Colorectal Cancer

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Introduction

Hepatic metastases occur in 60% of patients following resection for colorectal cancer. Although surgery is the only treatment associated with long-term survival in patients with colorectal cancer liver metastasis, the resectability rate has been reported to be between 15% and 25%.

Unresectability can occur for various reasons such as vessel involvement, size and number of the lesion, extrahepatic disease, predicted amount of future liver and liver failure. To improving of survival and resection rates of patients have been applied the various treatment modalities.

Operative Technique for CRC Liver Metastases – WR or Segmental Resection

In general, segmental resection was associated with a lower rate of positive resection margins than wedge resection. However, the majority of authors have reported no difference in survival rate according to the type of resection. If tumor is adjacent to or involves major intrahepatic vessels, resection of the entire segment is necessary, whereas wedge resection is universally accepted for small superficial lesions.

Strategies for ‘Unresectable’ CRC Liver Metastases

1. Downstaging chemotherapy

Neoadjuvant chemotherapy has been shown to downstage the disease and it increases the resection rate of unresectable liver metastases. Various regimens have been applied for liver metastases but mainly used FOLFOX or FOLFIRI regimen, the response rates

of these regimens range from 30% to 70%. The issues of optimal number of cycles of chemotherapy and optimal timing of surgery after chemotherapy have not been resolved as yet.

2. Portal vein embolization

Even if the liver tumor is technically resectable, surgery may be contraindicated if the anticipated remnant liver is too small, because of the high risk of postoperative liver failure. In these circumstances preoperative portal vein embolization can produce atrophy of affected liver and compensatory hypertrophy of the future remnant liver.

3. Two stage hepatectomy

In selected cases, unresectable case because of extensive bilobar disease can be treated by a ‘two-stage hepatectomy’. Although surgery is contraindicated if complete resection cannot be achieved, this relatively new approach justifies leaving some tumor in place, if this can be completely removed at a second resection. The rationale is to minimize risk of liver failure by performing a second and complete resection once regeneration has occurred. The second hepatectomy is performed only if can be potentially curative, after re-staging of metastatic disease, and in the absence of significant tumor progression.

Conclusion

Surgery for colorectal liver metastases is now well established. It has produced very significant benefits for patients. In addition to surgery, now in combination of various treatment modality including neoadjuvant chemotherapy, portal vein embolization, two-stage hepatectomy allows potentially curative sur-

gery on patients who previous could not have performed resection. These developments have led to more patients being cured of advanced colorectal cancer.

References

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