

Hepatectomy after hepatic arterial therapy with either yttrium-90 or drug-eluting bead chemotherapy: is it safe?

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Source

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Abstract

BACKGROUND:

The use of hepatic arterial therapy (HAT) with either yttrium-90 or drug-eluting bead therapy for initially unresectable hepatic malignancies has risen significantly. The safety of hepatic resection after hepatic arterial therapy (HAT) is not established.

OBJECTIVE:

The present study evaluates the safety profile for hepatic resection after HAT.

METHODS:

We identified 840 patients undergoing hepatectomy for primary or metastatic lesions. Forty patients underwent HAT before hepatectomy (pre-HAT). A 1:4 case-matched analysis compared three groups: (i) pre-HAT and pre-operative chemotherapy (n=40); (ii) pre-operative chemotherapy (n=160); and (iii) no pre-operative therapy (n=640). Controls were matched for age, resection type, maximal tumour size and magnitude of resection. Morbidity and mortality among groups were compared using a graded complication scale. Results: There were no differences in post-operative complications, grade of complication or liver-specific complications among the groups. A proportional hazards model for all patients did not demonstrate any association between increased complications and either pre-HAT or pre-operative chemotherapy when compared with patients without pre-operative therapy (P=0.7).

CONCLUSIONS:

Pre-HAT demonstrated similar morbidity, liver-specific morbidity and intra-operative complications when compared with patients undergoing pre-operative chemotherapy alone or without pre-operative chemotherapy. These results suggest that pre-HAT is safe and should not preclude hepatectomy in carefully selected patients.