Transarterial Chemoembolization in Patients with Metastatic Carcinoid Amenable to Cytoreductive Hepatectomy Results in Improved Survival but Similar Regional Disease Control Compared to Those Deemed Inoperable

Feria-Arias, Enrique; Arrese, David; Hatzaras, Ioannis; Schmidt, Carl; Shah, Manisha; Bloomston, Mark
The Ohio State University Medical Center; 410 W 10th Ave N924 Doan, Columbus, OH 43210.

Background: Metastatic carcinoid to the liver is often incurable but long-term survival is still possible. Transarterial chemoembolization (TACE) has traditionally been the locoregional therapy of choice for the management of patients with incurable carcinoid liver metastases. In this study, we reviewed the outcomes of patients who, in retrospect, may have been potential candidates for cytoreductive hepatectomy compared to those in whom surgery would never be offered. We hypothesize that patients with disease amenable to surgical debulking would have better tumor response, symptom control, and survival following TACE.

Methods: We identified 98 patients from our carcinoid database that underwent TACE as primary treatment for incurable liver metastases between October 2000 and July 2008. Two independent liver surgeons reviewed the patients’ pre-TACE imaging studies to classify them as potentially resectable (defined as ability to remove at least 90% of tumor burden) or unresectable. Demographics, clinicopathologic characteristics, response to TACE, complications, and survival were compared.

Results: The two groups were similar in terms of age, gender, histopathologic characteristics, and complications (p>0.05). Patients considered resectable (N=28) were more likely to present with carcinoid syndrome and had a median survival of 62 months with five-year survival of 53%. Patients considered unresectable (N=70) had a median survival of 21 months with five-year survival of 19% (p<0.001 vs. resectable). No difference was seen between groups in radiographic, symptomatic, or serologic responses or the durability of response following TACE.

Conclusions: Patients with metastatic carcinoid amenable to cytoreductive hepatectomy experienced longer overall survival following TACE compared to those with clearly inoperable disease. However, these seemingly biologically favorable patients did not have better or more durable response to TACE compared to those with more advanced disease. From this study, we conclude that a clinical trial comparing TACE to cytoreductive hepatectomy in patients with resectable yet incurable carcinoid metastases is warranted.