

potentially significant clinical endpoint that warrants further investigation.

Original article Abou-Alfa GK *et al.* (2006) Phase II study of sorafenib in patients with advanced hepatocellular carcinoma. *J Clin Oncol* **24**: 4293–4300

Adverse effect of TACE on survival after liver cancer surgery

Transarterial chemoembolization (TACE) before surgery for hepatocellular carcinoma can prevent intrahepatic metastasis, but there are concerns that the procedure might have an adverse effect on patient survival. Researchers in Japan, therefore, compared outcomes in 235 patients who underwent resection for hepatocellular carcinoma, 109 of whom underwent preoperative TACE.

The 5-year overall survival was 49.3% in the non-TACE group compared with 28.8% in the TACE group ($P < 0.01$); 5-year disease-free survival did not differ significantly between the groups. Death from liver failure was significantly higher in the TACE group (17.4% vs 4.8%; $P < 0.01$). Multivariate analysis showed that preoperative TACE ($P = 0.01$), portal-vein invasion ($P = 0.02$) and elevated serum aspartate aminotransferase levels ($P < 0.01$) had statistically significant negative effects on overall survival, but disease-free survival was not influenced by TACE. Overall survival was significantly worse in the TACE than in the non-TACE group for patients with stage I–II cancer and for non-cirrhotic patients ($P < 0.01$ for each); TACE had no effect on overall survival in patients with stage III–IV disease or in patients with cirrhosis.

The authors suggest that TACE might have an adverse effect on liver function, and recommend that TACE should be avoided for patients with resectable liver cancer, especially in noncirrhotic patients or those with early-stage disease.

Original article Sasaki A *et al.* (2006) Preoperative transcatheter arterial chemoembolization reduces long-term survival rate after hepatic resection for resectable hepatocellular carcinoma. *Eur J Surg Oncol* **32**: 773–779

Anterior-approach hepatic resection recommended for large hepatocellular carcinoma

Conventional-approach (CA) right hepatic resection for large hepatocellular carcinoma (HCC) can lead to iatrogenic tumor rupture and the spillage of cancer cells into the circulation. An anterior-approach (AA) technique involving complete venous outflow control before right liver mobilization avoids potential tumor cell release.

In a prospective controlled study, 120 patients with large (≥ 5 cm) liver HCC were randomized to either AA ($n = 60$) or CA ($n = 60$) right hepatic resection. Operative and survival outcomes of the two groups were recorded, and levels of plasma albumin mRNA were quantified as evidence of the number of liver cells released into the circulation by each procedure.

The two groups of patients showed similar operative blood loss, morbidity and duration of procedure; however, a higher number of patients in the CA group had major blood loss (≥ 2 l), resulting in a higher number of blood transfusions in this group. Overall cumulative survival of the AA group was significantly longer than that of the CA group (> 68.1 months versus 22.6 months; $P = 0.006$), a trend that was even stronger in patients with stage II disease ($P = 0.0009$) or lymphovascular permeation of the tumor ($P = 0.034$). In addition, patients in the AA group recorded lower plasma albumin mRNA levels at a number of stages of surgery. Multivariate analysis revealed that tumor staging, resection margin, and AA technique were all independent factors affecting overall survival. On the basis of these results, the researchers recommend the AA right hepatic resection technique for large HCC.

Original article Liu CL *et al.* (2006) Anterior approach versus conventional approach right hepatic resection for large hepatocellular carcinoma: a prospective randomized controlled study. *Ann Surg* **244**: 194–203