

Abstract

BACKGROUND: To improve the survival rate of patients with hepatocellular carcinoma (HCC) in whom surgery is not possible, various methods have been developed employing angiographic and percutaneous techniques. We analyzed our experience with various percutaneous therapeutic interventional techniques done for HCC in our center. **METHODS:** Sixty-one patients with inoperable HCC (mean age 48.9 [SD 13.8] y; 47 men) were treated between January 1997 and December 2000 by transcatheter arterial chemoembolization (TACE) alone (22), TACE with percutaneous alcohol injection (PEI) (20), transcatheter arterial embolization (TAE) with steel coils and gel foam for gastrointestinal bleed (7), percutaneous radiofrequency ablation (1), percutaneous preoperative right portal vein embolization (3) and percutaneous preoperative tumor embolization to reduce blood loss at surgery (8). **RESULTS:** In 42 patients treated by TACE and PEI and TACE alone, tumor necrosis was scored; over 50% necrosis was seen only after six and nine months in both treatment groups. The survival rates after six and nine months and the median survival were similar in the two groups. Of 7 cases treated with TAE with steel coils and gel foam, the gastrointestinal bleeding stopped in four; in the other three, bleeding did not stop completely although less transfusion was required. In the patient treated by radiofrequency ablation, follow-up contrast-enhanced CT did not show enhancing tumor mass. We noted left lobe enlargement after percutaneous preoperative right portal vein embolization, prior to right hepatectomy. **CONCLUSION:** In patients with HCC not amenable to surgical intervention, a variety of percutaneous therapeutic interventional techniques may be used.