

Living donor liver transplantation for recurrent hepatocellular carcinoma

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Long waiting time, associated with high dropout rate presents the main problem in patients with hepatocellular carcinoma (HCC) listed for cadaveric liver transplantation (LT). There have been only limited data on LT for treatment of recurrent nonresectable HCC. By 2001, the total number of patients who underwent LT for recurrent HCC in Europe had not exceeded 30–40 cases [1]. Presumably, the majority of the patients with tumor recurrence will be considered for less aggressive palliative procedures. As approximately 80% of recurrences are solely intrahepatic [1], a more aggressive approach might be attempted for highly selected patients. Within the last decade, living donor liver transplantation (LDLT) also became an accepted treatment for adult patients with end-stage liver disease. Due to the timely availability of an optimal graft, this technique offers new perspectives, particularly to tumor patients. As donor safety is the key issue of live donation, the risk of complications in the donor and the potential benefit for the recipient must be weighed against each other. Here we report on two patients with recurrent HCC treated by LDLT.

Between April 1998 and September 2003, 538 LT have been performed at the University Hospital Essen, of which 115 were LDLT. The indication for LT was HCC in 57 patients. Among these, 26 patients underwent standard cadaveric LT and live donation took place in 31 patients (27% of all LDLT). Two patients proceeded with LDLT due to recurrent nonresectable HCC. Case 1 was a 49-year-old noncirrhotic man with recurrent multiple HCC (6 cm in diameter for the largest one, T_{4a}N₀M₀) diagnosed 46 months after initial tumor resection. Meticulous diagnostic work up disclosed no extrahepatic

tumor spread. LDLT was considered as the only promising therapeutic option. At 33 months after LDLT the patient is alive and tumor free. Case 2 was a 36-year-old woman with negative hepatitis serology and unilobar nonresectable recurrent HCC (4 cm in diameter, T₃N₀M₀) that occurred 27 months after partial hepatectomy for HCC. As there was no additional tumor growth, the patient was offered LDLT. After uneventful postoperative course, the patient is in good condition and without evidence of tumor recurrence at post-transplantation month 24. Both donors recovered well and were back to work 3 and 4 weeks after surgery.

With the potential donor risk in mind, LDLT represents an appealing option for timely treatment of selected patients with recurrent HCC.

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