Treatment and outcomes of extrahepatic malignancy incidentally diagnosed during pretransplant evaluation for living donor liver transplantation

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Background: This study analyzed treatment and outcomes in patients with primary extra-hepatic malignancy (EHM) incidentally diagnosed during pretransplant evaluation for living donor liver transplantation (LDLT).

Methods: Of 4,621 adult patients undergoing LDLT over 19 years, 41 were diagnosed with EHM shortly before LDLT (incidental malignancy group), and 92 had been treated for EHM more than 6 months before LDLT (treated malignancy group).

Results: Most common EHMs were colorectal, thyroid, and stomach cancers in incidental malignancy group; and stomach, breast, thyroid, colorectal, and renal cell cancers and lymphoma in treated malignancy group. Mean interval between EHM diagnosis and LDLT in the incidental malignancy group was 1.5 ± 1.6 months. Of the 41 patients in this group, 15 (35.6%), seven (17.1%), and 16 (39.0%) underwent EHM treatment before, during, and after LDLT, respectively, whereas three (7.3%) underwent observation alone. During a mean follow-up of 70.1 ± 50.8 months, six (14.6%) patients showed tumor recurrence, and three (7.3%) died of tumor progression. All recurrences developed in patients with tumor stages higher than the earliest stage. The mean interval between EHM diagnosis and LDLT in treated malignancy group was 79.8 ± 79.6 months. During a mean follow-up of 63.2 ± 54.1 months, three (3.3%) patients showed tumor recurrence and one (1.1%) died of tumor progression. The incidence of EHM recurrence was significantly higher ($P=0.025$), and the overall posttransplant patient survival rate significantly lower ($P=0.046$), in incidental malignancy than in treated malignancy group.

Conclusions: Only patients with earliest-stage EHM detected shortly before LDLT are indicated for upfront LDLT combined with peritransplant EHM treatment.

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