Living donor liver transplantation in a pediatric patient with hepatic angiosarcoma: a case report

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Background: Hepatic angiosarcoma (HAS) is a rare malignant disease in pediatric patients. We report the case of a 3-year-old boy with HAS, which was treated with neoadjuvant chemotherapy and living donor liver transplantation (LDLT).

Case report: A previously healthy 3-year-old boy who presented with a firm mass in the upper quadrant of the abdomen was diagnosed with hepatoblastoma at a local general hospital and was referred to our institution. Percutaneous liver biopsy confirmed the diagnosis of HAS. The extent of the tumor was large, not allowing surgical resection; thus, neoadjuvant chemotherapy was performed. The size of the tumor was markedly reduced after two cycles of chemotherapy for 2 months; thus, LDLT was planned to remove the tumor completely. A left lateral section graft weighing 280 g was harvested from his 38-year-old father. The left lateral section graft was implanted according to the routine procedures of pediatric LDLT, including patch venoplasty of the recipient hepatic vein and portal vein. The explant liver showed a 9 cm-sized residual angiosarcoma with 60% regression. The patient recovered uneventfully and is doing well for 3 months with scheduled adjuvant chemotherapy.

Conclusions: Although there are only a few pediatric liver transplantation cases showing prolonged survival, liver transplantation appears to be a viable treatment option for long-term survival for pediatric patients with unresectable HAS.

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