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Biliary complications after paediatric liver transplantation: role of the biliary tube

The subject of this study was the evaluation of the role of the biliary tube (BT) in biliary complications (BC) after paediatric orthotopic liver transplantation (OLT). *Patients and methods:* Between 1 January 1989 and 31 December 1992, 111 paediatric liver transplantations were performed in Birmingham (director Prof. P. McMaster) in 89 patients. Median age at OLT was 2.5 years (range, 46 days to 14.8 years). Median weight at OLT was 12.8 kg (range, 4.7 to 54 kg). Of these, 43 grafts were whole livers (38.7%), 67 were reduced livers (60.3%) and one was a split liver (0.9%). Biliary reconstruction was achieved by duct to duct ($n = 43$, 38.7%), or a duct to Roux-en-Y loop ($n = 68$, 61.3%) anastomosis. BTs were used in 53 cases (47.7%), versus no BT in 58 cases. BC were defined as any abnormality, even minor, related to the biliary tree. Results were analysed during a minimum follow-up of 9 months. Statistical analysis was performed using Fisher's exact test. *Results:*

Actuarial patient and graft survival 1 year after OLT was 77.5% and 61.1%, respectively. BC occurred in 25 grafts (22.5%). These were: bile leaks ($n = 12$), biliary obstruction or dilatation ($n = 12$) and cholangitis ($n = 1$). BC occurred in 11 of 53 (20.8%) grafts with a BT, versus 14 of 58 (24.1%) grafts without a BT (NS). In patients without a BT requiring cholangiograms or biliary drainage, access for these was achieved percutaneously under ultrasound control. *Discussion:* A BT did not decrease the frequency of BC in this series, as has been reported by other centres [3]. BT can be replaced by percutaneous procedures for the diagnosis or treatment of BC [2]. Moreover, the absence of any prosthesis is an important advantage in small children [1]. *Conclusions:* BT does not prevent the occurrence of BC in paediatric OLT, and may be preferably replaced by interventional radiology in the management of children with BC.

References

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