INTRAHEPATIC BILIARY STRUCTURES AND POSTOPERATIVE HEPATIC COMPLICATIONS IN PATIENTS WITH CONGENITAL CHOLEDOCHAL CYST

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Purpose: Biliary complications on the liver side have been reported after total excision of the extrahepatic bile duct in patients with congenital choledochal cyst. The aim of our study was to elucidate an association between intrahepatic biliary structures and hepatic complications such as cholangitis and intrahepatic stones from the long-term postoperative results.

Methods: Morphological features were determined in a total of 40 patients with congenital choledochal cyst who had been noted to have dilatation of any sites of hepatic ducts at the time of biliary excision surgery. The patients' follow-up periods were from a range of 5 years to 23 years postoperatively. An association between biliary morphological changes and hepatic complications during these follow-up periods was assessed. Follow-up biliary images were obtained by US, MR cholangiography and Helical CT cholangiography.

Results: a) Stenotic bifurcations of the main hepatic ducts were observed in 32 patients, three of whom developed cholangitis and intrahepatic stones postoperatively. Bilioenteric stenoses were observed in two patients. One patient underwent removal of stones and excision of the stenotic portion with reanastomosis, and the other delivered stones spontaneously. The last one is under surgical considerations. b) Intrahepatic biliary stenoses were observed in 5, three of whom developed cholangitis. One patient who had been noted to have multiple stenotic regions of the left biliary tree developed intrahepatic stones, which was treated by left lateral segmentectomy of the liver.

Conclusion: Long-standing stagnation of the bile caused by biliary stenosis and dilatation may be associated with intrahepatic complications long after total excision operations.