The long-term outcomes of cyst excision and related problems

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Lecture : A choledochal cyst is a surgical condition characterized by the cystic extension of the bile duct. Many of the causes of the disease, pathology, natural history, and the most appropriate treatment are still controversial. Most cases of choledochal cyst have been discovered and treated during childhood, but about 20 to 40 percent have been found in adulthood. Unlike when detected and treated as a child, the accompanying disease or complications should always be considered in the case of adults.

The current surgical strategy for choledochal cyst is complete cyst excision with biliary reconstruction. In the past, the operative treatment of cystenterostomy was associated with a high rate of complications, including anastomotic stricture, recurrent ascending cholangitis, bowel obstruction, and malignancy. Changing the operative strategy from cystenterostomy to cyst excision and hepaticoenterostomy allows many patients to get along well without complications especially in the case of children. Despite the importance of long-term follow-up to detect late complication, there is little information on the postoperative follow-up of choledochal cyst patients. In reality, there are quite a few treatment-related problems. The incidence of these complications after cyst excision is reportedly between 5% and 30%. [1-3] Cholangitis, intrahepatic calculi, pancreatitis, pancreatic stone, and malignancy, etc. serve as an example of late representative complications after the surgery for a choledochal cyst. Intrahepatic stones and cholangitis are mainly due to bile stasis, resulting from anastomosis strictures, intrahepatic bile duct strictures, and residual intrahepatic ductal dilatation, whereas the leading causes of pancreatitis and pancreatic stones are considered to be pancreatic ductal anomalies and remnants of the intrapancreatic cyst. Therefore, the strategy for a wide bilioenteric anastomosis, as well as complete resection with no residue of the intrapancreatic portion of the cyst, is recommended to prevent these complications. The incidence of biliary carcinoma after cyst excision is reported to be 0.7-5.4%, with a higher prevalence in adults than that in pediatric patients. [4, 5] Biliary carcinoma is extremely rare when cyst excision is performed at less than ten years of age. Cancer may develop up to 10 years after choledochal cyst excision, indicating the need for life-long follow-up in this patient population. The duration of follow-up is the greatest challenge for both patients and physicians. To promote long-term follow-up, it is necessary to educate patients about late postoperative complications, so they understand its importance.

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