

LONG TERM COMPLICATIONS AFTER SURGERY FOR CHOLEDOCHAL MALFORMATIONS: A REVIEW OF THE DUTCH NATIONAL REGISTRY

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Aim of the Study: A choledochal malformation (CM) is a rare entity in the Western world. We gathered data of all children who underwent surgery for CM in the Netherlands between 1989 and 2015. This cohort has previously been reviewed, the current study has focused solely on the long term complications of CM's treated with extrahepatic bile duct resection followed by hepaticojejunostomy.

Methods: retrospective chart review including all Dutch patients < 18 years with a CM. Type V CM's were excluded. We only included complications occurring > 30 days postoperatively. During this study we focused on complications necessitating re-intervention and the development of malignancy.

Main Results: Sixteen patients (17 %, 11 females and 5 males, median age at time of surgery of 2.4 years, range 0.03 – 17.4) out a total of 94 (65 females and 29 males, median age 2,3 years, range 0.03-17.7) developed long-term complications: cholangitis in 12 (13 %), anastomotic strictures in 4 (4%), intrahepatic stone formation in 2 (2%), and liver abscess, incisional hernia in 1 (1%). No malignancies were found in our entire cohort with a median of 13,6 years of follow up.

Complications occurred after a median of 15 months (range 1 – 280) after surgery. Seven patients (7 %) needed a re-intervention. Re-operation was performed in five patients (for stenosis of the hepaticojejunostomy, recurrent bile duct stone formation, adhesive ileus and persistent intrahepatic dilatation resp). One patient needed radiological drainage for recurrent cholangitis and one patient ERCP for bile duct stone formation.

Conclusion: We did not observe any malignancy, but follow-up still is relatively limited. However, long-term morbidity is significant, with major implications for the patient, as 7 % of patients need a radiological or surgical re-intervention.