CHOLEDOTHAL CYST: OUR EXPERIENCE IN A SINGLE CASE BY LAPAROSCOPIC APPROACH

F. Molinaro, M. Sica, E. Bindi, F. Mariscoli, R. Angotti, M. Messina

Division of Pediatric Surgery, Department of Medical Science, Surgery and Neuroscience, University of Siena, Italy

Introduction
Choledochal cysts are disproportionate dilatations of the biliary system for the presence of a congenital malformation, the persistence of the common biliary pancreatic channel. Complete excision of the cyst is the best treatment strategy to avoid long-term complications especially malignant transformation, recurrent cholangitis and gallstones. We present a clinical case treated at our center with minimally invasive surgery.

Case Report
A female patient was admitted to our center at the age of 3 years, with right hypochondrial pain, followed by jaundice, vomiting and recurrent fever. No abdominal mass present. Abdominal ultrasound was performed and also Magnetic resonance cholangiopancreatography. According to the Todani classification modified by Alonzo-Lej classification we identified a type I with three gallstones. She underwent laparoscopic cyst excision and hepatico-jejunostomy Roux-en-Y with perianastomotic drainage positioned. No early and late postoperative complications after 1 year of follow-up.

Discussion and Conclusions
Choledochal cysts can present at different ages with variable symptoms. Common presentations include abdominal pain, jaundice, and right upper quadrant mass and are most common seen in pediatric patients. Associated congenital anomalies of biliary tract may be present. Most cases of choledochal cyst disease have type I and IV-A cysts. If left untreated, choledochal cysts have an increased risk of malignant transformation. Early surgical excision and restoration of biliary tract continuity is mandatory, whatever the symptom severity to avoid long term complications whenever possible. Currently the gold standard treatment is the minimally invasive surgery, in fact the advantages of this technique is the intraoperative visualization of deeper structures, decreased postoperative pain, shorter hospital stay, improved cosmetic result and decreased postoperative ileus. However, these cases remain reserved for highly specialized surgeons with a thorough understanding of hepatobiliary anatomy and minimally invasive techniques. Finally, limited case series of robotic pediatric choledochal cysts resection and reconstruction have been reported with acceptable outcomes, although more studies are needed before widespread acceptance and implementation of this technique in pediatric age.

PARTIAL CONGENITAL BOWEL OBSTRUCTION BY DUODENAL ATRESIA WINDSOCKS TYPE: CASE REPORT

M. Molinaro, F. Mariscoli, M. Sica, E. Bindi, R. Angotti, M. Messina

Division of Pediatric Surgery, Department of Medical Science, Surgery and Neuroscience, University of Siena, Italy

Introduction
Duodenal atresia Windsocks type is a rare condition of congenital bowel obstruction. Thanks to recent technological advancements of prenatal diagnosis it is possible to make a diagnosis of duodenal atresia with high degree of certainty through the radiological sign of “double bubble”, but up to date it is not yet possible to identify the type of duodenal atresia. We report the case of a patient with prenatal diagnosis of “double bubble”. The patient had no other concomitant malformations.

Case Report
The patient came to our attention after prenatal ultrasound that showed a picture of double bubble. At the 27th week of gestation we performed fetal MRI that confirmed the US pattern of double bubble but it did not identify with certainty the type of duodenal atresia. At birth the patient underwent GI rx examination that showed a picture of partial duodenal obstruction compatible with the Windsocks type. On the following day, we performed endoscopy which showed the presence of duodenal membrane, so the patient underwent surgical treatment with a longitudinal duodenal incision in order to treat the wind-sock membrane. After one month a further Upper-GI rx examination showed a regular transit of the contrast. Four months after the first operation the patient underwent new surgical treatment for bowel obstruction by adhesions. The operation was successful and the patient had a complete recover.

Conclusions
Patients with prenatal diagnosis of “double bubble” require a multidisciplinary approach for proper clinical management. Unfortunately it is not currently possible to identify with certainty by prenatal ultrasound the type of duodenal atresia, but in case of incomplete bowel occlusion, the possibility of an atresia Windsocks type should always be considered, especially for setting the right surgical approach.