CASE REPORT

Huge Choledochal Cyst in a Newborn

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A B S T R A C T

A 48-hour old female baby was brought to ER with huge abdominal distension. Ultrasound showed a large cystic swelling occupying almost whole of the abdomen more on the right side in upper part. CT scan abdomen suggested cyst probably arising from the liver. Patient was operated in same admission as there were associated vomiting. At surgery a large choledochal cyst was found. Cyst was excised along with gallbladder and Roux en Y hepaticojejunostomy performed. Postoperative recovery was uneventful.

Key words *Choledochal cyst, Newborn, Neonatal abdominal cystic lesions.*

INTRODUCTION:

Abdominal cysts in newborn period are not uncommon. Many of them are identified on antenatal ultrasound.[1] Most of the cysts are of genitourinary origin.[2] Less commonly cysts may originate from heptobiliary tree.[3] Cysts of large size are infrequently reported. In this report a newborn with huge abdominal cyst is presented where cyst of extrahepatic biliary tree origin found.

CASE REPORT:

A 48-hours old baby girl weighing 2.8 Kg was brought from a distant rural area with gross abdominal distension which was noted at the time of delivery. Antenatal care was not appropriate and no ultrasound was performed. Baby passed meconium on day one. During subsequent hours patient developed yellow colored vomiting. On examination baby was active with huge abdominal distension. A large firm mass was palpable, more on right side and in center of the abdomen extending up to suprapubic region. It was tense but non tender. There was hardly any mobility in either direction because of its size. Genitalia was normal in appearance and anal opening was at its place.

Blood investigations were in normal range. Abdominal ultrasound showed a huge rounded extrahepatic cystic area abutting porta hepatis with mild intrahepatic duct dilatation. Gall bladder was not visualized. CT scan abdomen reported hypodense mass containing fluid. It was noted in central and upper abdomen measuring about 9.8 cm x 8.5 cm x 10 cm (Fig I a & b). Common bile duct was not separately visualized. There was mild to moderate intrahepatic duct dilatation. The mass pushed the bowel loops to left side. In differential diagnosis of choledochal cyst was suggested.

At surgery a huge choledochal cyst was found. Gallbladder was small and common hepatic duct was minimally dilated. Cyst was excised easily along with gallbladder and Roux en Y hepaticojejunostomy was performed. Patient recovered uneventfully after surgery and remained well in postoperative period. She was discharged home on postoperative day 8. At follow up baby is thriving well.

DISCUSSION:

The incidence of choledochal cyst is reported as 1

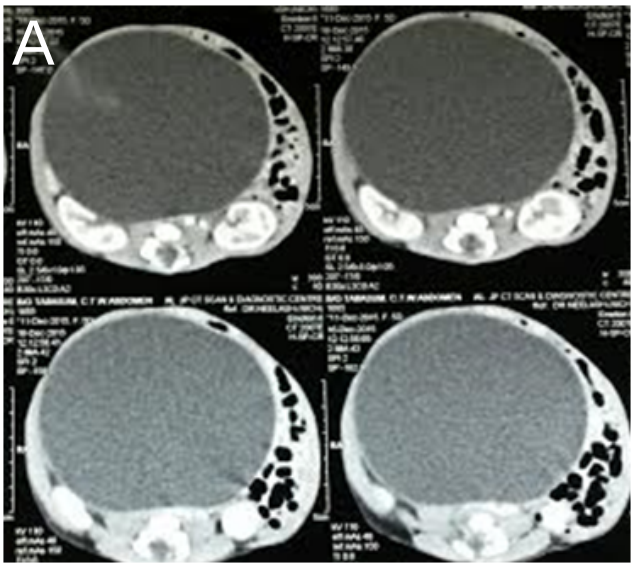

Fig I: A & B: CT Scan abdomen showing huge fluid density cyst .

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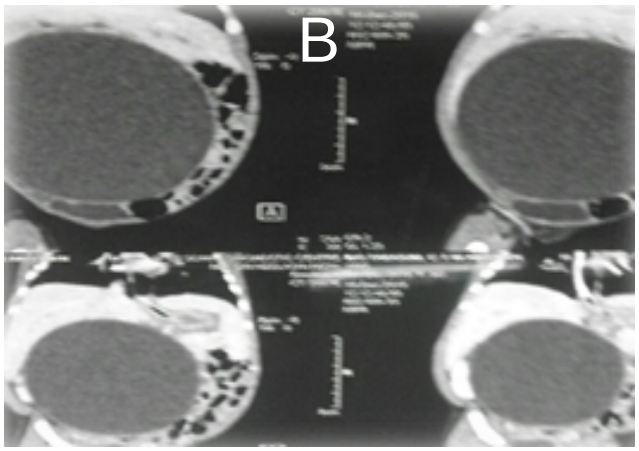

in 10,000 to 1 in 15,000 live births from western population based data.[4] According to the commonly used Todani classification for choledochal cyst the most common type, the type I, is the cystic dilatation of the common bile duct without associated intrahepatic ductal dilatation. It accounts for about 80-90% of choledochal cysts.[5] Most of these cysts are of small size and patients present with other symptoms rather than mass only. In the index case patient was born with huge cyst at birth which is unusual for a choledochal cyst.

Our patient was a female and initially on examination ovarian cyst was also considered as a differential diagnosis along with possible cyst of renal origin.[6] Genitalia was normal thus hydrometrcolpos and urogenital sinus anomaly were excluded. Both ultrasound and CT scan helped in suggesting cyst of either hepatic or biliary origin. Hepatic cysts are rare but can attain huge size though it is unusual for extrahepatic biliary cyst to present like this.[7]

Surgical approach adopted in the patient was a standard one as described for choledochal cyst. Initially it was decided to just drain the cyst but as dissection was easy and quick, so complete cyst excision with Roux en Y procedure was performed. Dissection may be messy in long standing cysts with history of recurrent pain, fever and jaundice. Postoperative outcome was uneventful which was quite heartening. Huge choledochal cyst in a newborn is rarely reported and it may be kept as one of the differential diagnosis in cystic abdominal masses.

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