A CHILD WITH AN ANTENATAL DIAGNOSIS OF A CYST IN ABDOMEN – A CASE REPORT

Muhammad Ghias, Win Zaw. Northampton General Hospital NHS Trust

Objectives and Study To describe a case which posed difficulties in diagnosing an infant with biliary atresia.

Methods and Results A term female infant was born by normal delivery with no significant perinatal events. The antenatal scan had showed a cystic abdominal mass (9 × 8 × 10 mm) of unknown origin.

An ultrasound scan was done on Day 4 of life. It showed an 8 × 9 × 8 mm very well-defined spherical fluid filled mass lying in the position of the second part of the duodenum. This was adjacent to but not apparently arising from the head of the pancreas. Radiologically it was thought to be a duplication cyst.

She continued to be fed well. She was seen at the clinic on Day 27 for prolonged jaundice. Her total bilirubin was 152 μmol/l with conjugated bilirubin of 120.5 μmol/l and ALT of 54IU/L. Further investigations were done.

Ultrasound scan on Day 30 showed similar findings to the previous one. The cyst was adjacent to the duct but not connected. There was no dilatation of bile duct.

MRCP was done on Day 34. It showed a 6 mm cyst adjacent to distal CBD and no connection between the cyst and the duct. Intrahepatic and CBD were not dilated.

Serial LFT were showed high level of conjugated fraction of bilirubin as well as gamma GT. Initially the stools were pigmented but they became pale and urine became darker on Day 29.

She was then transferred to the Tertiary Liver unit where she underwent liver biopsy which showed plugs of bile, canalicular cholestasis and periductal fibrosis.

On Day 41, she underwent surgery for Kasai procedure. The intraoperative cholangiogram showed a cystic structure with no connection with the biliary tree. Intraoperative findings were suggestive of biliary atresia.

Conclusion The presence of a cystic structure at the porta hepatitis without intrahepatic biliary ductular dilatation goes towards the diagnosis of biliary atresia, in the antenatal period. Cassacia et al found that anechoic small cyst in the hepatic hilum is highly suspicious of BA.

Presence of a triangular cord sign which is the visualisation of the fibrotic cord in the portal hilum is one of the hallmarks of sonographic imaging with a positive predictive value of 95% 4. We were not able to identify this sign. The utility of MRCP has not been encouraging in view of the cost, varying results and the need for immobilisation.

This case has demonstrated to have a low threshold of diagnosing BA in the presence of antenatal diagnosis of cyst at the porta hepatitis and early referral to the tertiary centre is advisable.