

■ Case Report

AGENESIS OF GALLBLADDER

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Abstract

Congenital absence of gall bladder is a very rare abnormality which is usually identified accidentally. Ultra sonography is the main diagnostic tool. It has good prognosis.

Keywords : Gall bladder, agenesis, ultrasound

Introduction

Congenital absence of gall bladder is a very rare but well recognized congenital abnormality. This abnormality was first described in 1701. The reported incidence ranging between 0.01 and 0.05%¹. Only 200 cases have thus far been reported in the world medical references². To my knowledge, this is the first case reported from BPKIHS that was diagnosed by imaging modalities.

However, clinical detection of this abnormality is incidental. Agenesis of gall bladder should be highly suspected whenever the gall bladder is not visualized by ultrasound or at laparoscopy done on misinterpreted ultrasound. Ultrasound is the standard diagnostic tool in the initial workup for gallbladder disease. This tool has 95% sensitivity³. The condition may be asymptomatic, present with symptoms suggestive of biliary tract disease or associated with congenital malformations. The person with isolated gallbladder agenesis is healthy. No treatment is needed. The prognosis is excellent.^{4,5}

Case report

A 6 yr. old child presented in GOPD. with c/o chronic skin problem in legs. ?fungal infection. On examination child was afebrile, pulse 70/min and temp was normal. There was no jaundice, pallor, cyanosis,

clubbing, lymphadenopathy and oedema. . RS, CVS, GIS, MS all were clinically not abnormally detected. On L/e there was erythematous, irregular shaped skin lesions diffusely distributed in legs in anterior, posterior, lateral and medial aspect of legs. the lesions were non eczematous but extensively itching. There was no signs of secondary bacterial infections. The lesions were distributed below the knees.



Fig 1: 6yrs old child

Fig 2: skin lesions

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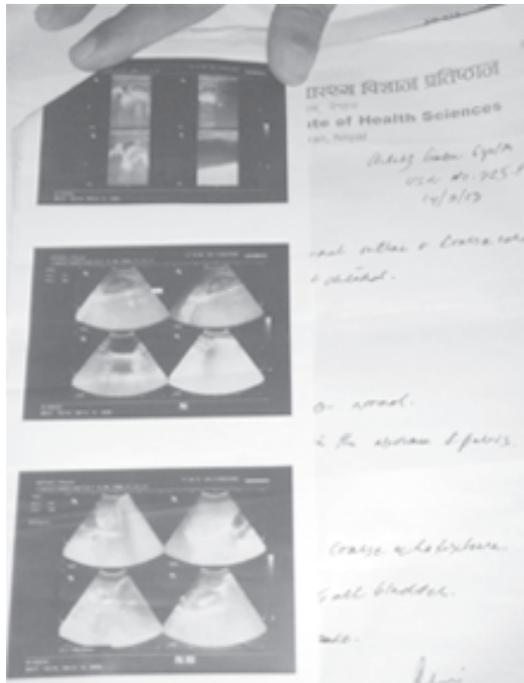


Fig 3: ultrasound report



Fig 4: Ultrasound report

On laboratory examination: 07/08/2008 in BPKIHS.
 TLC-11000...../cc, N.....70.....%,
 L.....30.....%, B.....%, E.....%,
 M.....%.

Blood sugar fasting 69.....mg%.

AST-53 U/l (N <38).....

ALT-48 U/l (N <41).....

Alkaline Phosphatase- 423 U/l (N 64.0-306).....

Second visit on-14/8/2008with USG report-

Enlarged liver with coarse echo-texture. Non visualized gall bladder. ?contracted, ? congenital absence.

To reconfirm again the liver enzymes and USG was done in Dharan Diagnostic Centre. The A.L.T – 25 IU/L (5.0 -35), A.S.T. 57 IU/l, (8.0 – 40.0) Alkaline Phosphatase – 287 IU/L. (N =25.0 -100). The USG report showing- Non visualized gallbladder suggestive of congenital absence. Mild hepatomegaly.

Discussions

Lemary first reported agenesi s of gall bladder in literature in 1701. The reported incidence in literature ranges between 0.01 and 0.05%. Agenesis of the gallbladder is most often a sporadic (unpredictable) occurrence with no clear cause. However, there are families in which the condition has occurred in several members suggesting that there are hereditary forms of gallbladder agenesi s. Children with gallbladder agenesi s plus distant malformations tend to have trisomy 13 or another chromosome abnormality that carries a poor prognosis.

Ectopic gallbladder locations include intrahepatic, lesser omentum, retroperitoneal, retrohepatic, within the falciform ligament, retroduodenal, and retrohepatic areas. There are 3 categories of agenesi s of gall bladder eg. 1. Multiple foetal anomalies. These patients invariably die in the perinatal period due to associated anomalies and agenesi s of the gall bladder is only recognised at autopsy. The largest group had multiple anomalies involving the genitourinary reproductive tract, renal, gastrointestinal imperforate anus, tracheo-oesophageal fistula, cardiovascular cardiac defects, single umbilical artery, and skeletal systems. Other patients had predominantly cardiac anomalies in addition to the agenesi s of the gall bladder. had abnormalities associated with defects of the anterior abdominal wall.⁸

The most frequently encountered malformations were cardiovascular, gastro-intestinal, genitourinary, anterior abdominal wall, and central nervous system. In this group, gall bladder agenesis is only a trivial anomaly. 2. Asymptomatic group - Agenesis of gall bladder was discovered either at autopsy, at laparotomy for unrelated diagnosis or by screening the family members of patients known to have agenesis of gall bladder. These patients do not have symptoms of biliary tract. 3. Symptomatic group - This major group present in 4th or 5th decades. This is usually an isolated anomaly. Common symptoms include chronic right upper quadrant pain, dyspeptic, nausea and vomiting, fatty food intolerance and jaundice. The possible mechanisms of symptoms include primary duct stone, biliary dyskinesia or non-biliary disorder³ further imaging of the extrahepatic biliary system by magnetic resonance cholangiopancreatography and endoscopic ultrasound confirmed the diagnosis of congenital absence of the gallbladder^{8,9,10,11}.

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