

Agenesis of gallbladder and cystic duct: Diagnosed outside the operating room clinical case presentation and review of literature

Puneet K Agarwal

All India Institute of Medical Sciences Bhopal, India

Introduction: Gallbladder agenesis is a rare congenital abnormality of the biliary tract. The diagnosis is usually made during surgery. It has been proven to be very difficult to make a correct preoperative diagnosis of agenesis of the gallbladder in symptomatic patients. The purpose of this presentation is to share our experience about a case of middle-aged lady who presented with symptoms of biliary colic. Ultrasound examination revealed cholelithiasis with contracted gallbladder. On Contrast CT examination gallbladder could not be visualized. On further imaging as MRCP diagnosis of gallbladder agenesis could be confirmed. This helped in avoiding unnecessary surgery and patient was conservatively treated.

Clinical Case: A middle-years lady presented to surgical department with symptoms of right upper abdominal pain and dyspepsia. On examination she was hemodynamically stable and there was no fever. On examination abdomen was soft with negative Murphy's sign and active peristalsis. Laboratory tests were within normal limits. Ultrasound imaging revealed cholelithiasis with contracted gallbladder. Subsequently the Contrast CT scan of abdomen was done which revealed non-visualization of gallbladder and cystic duct. Further to confirm MR cholangiogram was done and the gallbladder and cystic duct were found to be absent with rest of the extra hepatic biliary tree to be normal.

Conclusion: Agenesis of the gallbladder is a very rare condition and can create difficulties for surgical team when diagnosed during Laparoscopic Cholecystectomy. With the development of better imaging modalities it has been possible to diagnose gallbladder agenesis before surgery. Correct preoperative diagnosis can help to avoid unnecessary surgeries and reduce exploration complications.

Discussion: It is estimated that 23% of patients with gallbladder agenesis present with symptoms of biliary colic. Out of these patients, 90.1% will present colicky pain in the right hypochondrium, 66.3% with post prandial nausea and vomiting, 37% with acid peptic symptoms and 27% CBD stones. These symptoms can be attributed to the theory of biliary dyskinesia. It is well known that ultrasound is the imaging technique of choice to assess the gallbladder; but difficulty in reporting arises when gallbladder is either contracted or atrophic. WES ((Wall, Echo and Acoustic shadow) triad was described for diagnosis of gallstones. Some ultrasound examinations performed on patients of agenesis of gallbladder can report cholelithiasis and this can be explained owing to the fact that radiologist can misdiagnose the periportal tissue, subhepatic peritoneal folds, duodenum or calcified hepatic lesions with the WES triad.

Biography

Puneet K Agarwal has completed his MBBS degree and Masters in Surgery (MS) from Jawaharlal Medical College, a reputed medical school affiliated to Aligarh Muslim University, Aligarh. Presently he is working as an Associate Professor in Department of Surgery in All India Institute of Medical Sciences Bhopal, an autonomous institute of national importance and affiliated to Government of India. He has published more than 25 articles in different journals.