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LETTER TO EDITOR (VIEWERS CHOICE)

NEONATAL GALL BLADDER PERFORATION- THE UNKNOWN DILEMMA

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Gall bladder perforation in the newborn age is extremely rare. There are around only 15 cases reported worldwide to the best of our knowledge.[1] The diagnosis is dilemmatic due to overlap with neonatal intestinal obstruction which happens to be a much more obvious entity at this age.[1,2] Confirmation is usually made per operatively as imaging studies are often inconclusive.

We report a five days newborn, 34 weeks, 1800 grams referred with complains of distension of the abdomen and intolerance to feed. Imaging showed dilated loops of bowel. Counts and CRP were elevated diagnosing us a case of septic ileus. Upper GI contrast study was done showing complete passage of contrast to rectum. Inspite of conservative management, the abdominal girth increased significantly over the next 48 hours with worsening of blood parameters. Patient was decided to be explored on the seventh day. Per operative findings showed a large gallbladder with a 1x1cm perforation at the fundus and leaking biliary peritonitis. Common bile duct was normal. Intra operative cholangiogram showed dye passage to duodenum. Cholecystectomy was done with peritoneal lavage. Post operatively, the newborn started improving and could be sent home after a week's stay. Follow up was uneventful.

Gall bladder perforation is a rarest of rare diagnosis in newborn with a reported incidence of 1.5 per 1,000,000 live births.[3,4] To date, close to only 15 cases have been reported to the best of our knowledge.[1,4] In most cases, the etiology remains unclear. As with most dilemmatic diagnoses, the etiology has been attributed to vascular and/or metabolic compromises with no conclusive depth. The gall bladder fundus is supposedly the least vascular area and hence prone to rupture.[3] In fact, no diagnostic technique can be confirmatory in a newborn to diagnose a perforated gall bladder. The sick newborn presents with sepsis, distension, vomiting and all tell tale signs of a bowel obstruction. We were surprised to find a normal contrast study in this newborn which ruled out immediate bowel pathology. It is imperative that sometimes, exploratory laparotomy must be done on clinical basis in such cases to avoid mortality. Treatment is always early surgery and a proper cholecystectomy suffices in most cases.[3,5] Ultrasound and Intra operative cholangiogram is necessary to rule out choledochal cyst and any distal bile duct obstruction.[5]

We recommend consideration of early surgical exploration in sick neonates presenting with a distended abdomen and worsening with conservative management, with no confirmed diagnosis. Perforation of gallbladder, even though dilemmatic, must be included in index of suspicion when dealing with such newborn patients. This case adds to the list of such rare newborns presenting with this extremely uncommon pathology.

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