RESEARCH PAPER | Medical Science | Volume : 5 | Issue : 6 | June 2015 | ISSN - 2249-555X

Blunt Injury Abdomen - Isolated Gallbladder Injury A Rare Case Report

KEYWORDS: Blunt injury , Gall bladder, avulsion, hemoperitoneum.

Prof . S.V.senthilnathan
Mch - Corresponding author, Head of the department, of paediatric surgery, Institute of child health & Hospital for children, Egmore, Chennai

Dr.R.Ramesh Kumar
Mch (Postgraduate) Resident , Department of paediatric surgery, : Institute of child health & Hospital for children, Egmore, Chennai

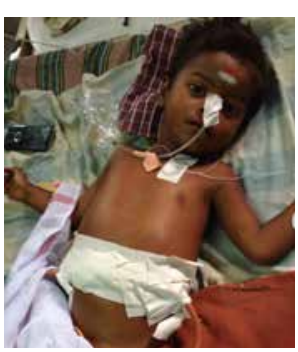
ABSTRACT *5 Years old male child with h/o fall followed by abdominal pain , distension of abdomen and fever X 10 days duration. H/o non-bilious vomiting. Child was evaluated and diagnosed as a case of hemoperitoneum at outside hospital and referred to our hospital. O/E pallor +, tachycardia, dehydration +. BP – 90/60 mm of Hg. P/A - distended , diffuse tenderness, guarding & rigidity +. Investigated with USG & CECT Abdomen with findings of moderate hemoperitoneum with Gallbladder wall oedema. Child was resuscitated and diagnostic paracentesis shows blood mixed with bile. Hence we proceded with Laparotomy with findings of through and through perforation of posterior wall of gallbladder with exposed mucosa. Gallbladder avulsed from gallbladder fossa –type ii avulsion. Cholecystectomy & peritoneal lavage done. Post- op period was uneventful.*

Case History :
Five years old male child presented with h/o fall followed by abdominal pain & distension (fig .1) , fever of 10 days duration. H/o non-bilious vomiting .On examination pallor & tachycardia + . P/A : Diffuse tenderness with guarding &rigidity.

Investigations : Hb – 8.6gm%, Total WBC - 11,500, Platelet – 2.6 lakhs, PT/INR – 1.1 Liver function test : within normal limit.

X –ray abdomen (fig.2) - Free fluid abdomen, no pneumoperitoneum.

USG Abdomen (fig.3) - Echogenic free fluid ;
Oedematous gallbladder .
CECT Abdomen (fig.4) - Moderate hemoperitoneum with Gallbladder wall odema.
Other organs normal.



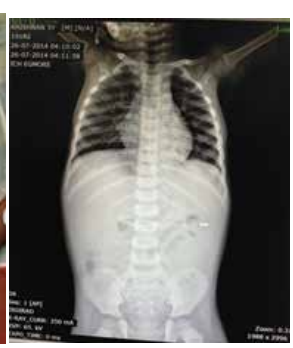
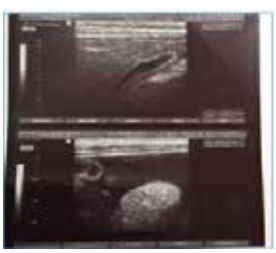


Fig.1 . 5 yrs old child with blunt injury abdomen.
Fig.2 X-ray Abdomen with free fluid.



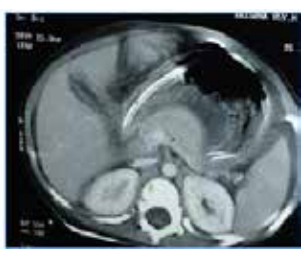


Fig .3 USG abdomen with GB wall edema.
Fig .4 CECT abdomen with hemoperitoneum & GB wall edema.

Child was resuscitated and once the general condition stabilized , diagnostic paracentesis was done . It shows blood mixed with bile , hence emergency laparotomy was planned.

Laparotomy findings : bile stained free fluid, omentum & bowel (fig.5).

Common bile duct – normal , Haemorrhagic contusion of pancreas.

Gallbladder - through and through perforation of posterior wall with exposed mucosa (fig.6). Avulsion from Gallbladder fossa (type ii)

Fig.5 Intra-op picture with bile stained bowel.
Fig.6 perforated Gallbladder

Procedure : Cholecystectomy & peritoneal lavage done Post-op period was uneventful.

Volume : 5 | Issue : 6 | June 2015 | ISSN - 2249-555X

Discussion : Gallbladder injury following blunt abdominal trauma is very rare. With prevalence of only 2% in all patients undergoing laparotomy. Usually it is associated with other organ injury. The signs of gallbladder injury - collapsed gallbladder with pericholecystic fluid (or)hydropic gallbladder with intraluminal haematoma. Most cases of gallbladder injury occur in penetrating trauma.

Predisposing factors : - thin walled gallbladder, Distended gallbladder, Alcohol consumption – increased tone of sphincter oddi & Biliary pressure.

Types : Contusion
Perforation - most common.
Avulsion - 2nd most common type.

Diagnosis : Early diagnosis is must, but it is very difficult. Diagnostic peritoneal lavage not Useful. Ultrasonogram and CT abdomen is most appropriate. Scintigraphy for early diagnosis.

Management :
Diagnostic laparoscopy / Exploratory laparotomy . The treatment depends on severity of injury. Cholecystectomy is recommended treatment. In cases of contusion conservative management is ideal.

Conclusion : Extrahepatic biliary system injury is possible after blunt abdominal trauma with atypical clinical aspects. Diagnostic scintigraphy for early diagnosis. Since it is very rare condition , suspicion is important. Early diagnosis and intervention will save the lives and prevent complications / morbidity & mortality.

REFERENCE 1. Journal of trauma 2011 April ; 70 (4) ; 1005- 10. | 2. HPB Surgery 1989 Nov ; 1(4) 359 – 62. | 3. Afr. J Paedi. Surgery 2013 Jan - April. | 4. The internet journal of pediatrics & neonatology 2012 ; volume 14,number -1. | 5. Jaggard MK. Choudhry M . Journal of trauma infants & critical care 2011;70(4); | 1005-1010 |