An Unusual Presentation of Infantile Gangrenous Acalculous Cholecystitis

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Cholecystitis is rarely seen in infancy. Only a few cases (1-3) have been reported so far. The diagnosis of infantile cholecystitis is extremely difficult and most of the cases reported were diagnosed only at operation.

Case Report

A 6-month-old male child weighing 4.5 kg was admitted with a history of high swinging temperature, pain abdomen, vomiting and absolute constipation for 5 days. The baby was toxic, dehydrated and febrile (103°F). The abdomen was distended, tender and generalised muscle guarding was present. The bowel sounds were absent. Per rectal examination revealed empty rectum. The hemoglobin was 7 g/dl, total leucocyte count was 12000/cu mm with 78% polymorphonuclear leukocytosis. A plain X-ray abdomen showed hazi-
ness with multiple gas and fluid levels. A provisional diagnosis of intestinal obstruction with peritonitis was made.

After initial resuscitation by intravenous fluids, antibiotics and Ryles tube suction, exploratory laparotomy was performed by right upper abdominal transverse incision. About 500 ml of bile was present inside the peritoneal cavity. The intestines were normal but the gall bladder was gangrenous and perforated at two sites (Fig 1). There was no calculous inside the gall bladder, common bile duct or peritoneal cavity. A diagnosis of perforative, acalculous gangrenous cholecystitis was made and cholecystectomy was performed. The post operative recovery was uneventful. The histopathology of the gall bladder revealed acute gangrenous cholecystitis (Fig. 2).

![Fig. 2. Microphotograph showing necrosis of the gall bladder wall. Mucosa is visible in the right upper corner (H & E ×125).](image)

**Discussion**

Acalculous cholecystitis in children is uncommon(2-4). However, during the infantile period acalculous biliary diseases is extremely unusual and there are only isolated reports of this problem(1-3, 5-9). The cases reported so far mostly presented with a vague lump abdomen without any features of generalized peritonitis. Our patient was a unique case of gangrenous perforative acalculous cholecystitis presenting as generalized peritonitis with features of adynamic intestinal obstruction. The etiology of infantile cholecystitis is uncertain. Probable predisposing factors are (i) obstruction of the cystic duct from either a congenital malformation or external compression(10); and (ii) biliary stasis related to changes in bile flow and consistency, e.g., after trauma, sepsis or severe dehydration(4,11). The diagnosis of acute gangrenous acalculous cholecystitis is very difficult and most of the cases have been diagnosed only at operation.
REFERENCES


