

## APPENDICITIS IN THE NEW BORN

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Acute appendicitis is very rare in neonates. The incidence is less than 2% amongst the children treated for acute appendicitis below the age of 2 years(1). We encountered only two cases of neonatal acute appendicitis in our long surgical practice.

### Case Reports

Two male neonates were treated for acute appendicitis at the Department of Pediatric Surgery, S.M.S. Medical College and attached S.P.M. Child Health Institute, Jaipur. Both were born of full term normal deliveries and presented at 7 days and 28 days of age, respectively. They had complaints of refusal to feed, excessive cry, bilious vomiting and increasing abdominal

distension. There was no birth asphyxia or neonatal jaundice. They had normal passage of meconium at the time of birth. Obstetric history was not contributory in either case.

At admission, the patients were dull and listless and had moderate dehydration. Both had distended abdomen with generalized rigidity. There was no palpable mass or abdominal wall edema. In addition, the first patient had obliteration of liver dullness and absent bowel sounds.

Both the patients had polymorphonuclear leucocytosis and mild hyponatremia. Upright abdominal X-rays revealed few air-fluid levels. In addition, the X-ray abdomen of the first patient also revealed free air under both domes of diaphragm.

Both the cases were resuscitated prior to operation by nasogastric suction, IV fluids and combination of broad spectrum antibiotics. On exploration, there was generalized peritonitis with sero-purulent peritoneal fluid. The appendices were severely inflamed with perforation at their tips and gangrenous patches on their distal halves. Rest of the gut and viscera were normal. Appendectomies were performed and a thorough peritoneal toilet was done with povidone iodine solution in saline. The histopathological examination confirmed the diagnosis of acute appendicitis. Normal ganglion cells were seen in both the appendices. Postoperative period was uneventful in both cases.

### Discussion

Acute appendicitis is rare in infants. Until 1952, only 7 cases with acute appendicitis, during the first two weeks of life were

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reported(2). Between 1952 and 1963 a further 19 cases were reported, of these only four patients survived(3). In subsequent years only occasional single case reports have been added. We could find only 2 cases of acute appendicitis in the English literature in neonates less than 24 hours of age(2,4).

Appendicitis in the neonate may be due to underlying causes such as Hirschsprung's disease, neonatal necrotising enterocolitis and meconium plug syndrome. Hirschsprung's disease should be suspected if the perforated appendix does not appear inflamed(5). Smith(6) described a neonate, 4 days of age, to have recovered from appendiceal perforation after exchange transfusion. It was possible that hyperbilirubinemia due to RH incompatibility was one of the contributing factors in perforation. In our series of two cases there was no underlying cause for appendicitis.

Neonates stand appendicitis poorly due to the thin wall of appendix which perforates easily. A tiny whips of omentum has little ability to seal off the infectious process and the small abdominal cavity with mobile viscera helps in rapid dissemination

of infection(7). Only proper perioperative resuscitation and early surgical intervention can result in a favorable outcome.

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## NOTES AND NEWS

### THIRD ANNUAL IAP HARYANA CHAPTER CONFERENCE

The Third Annual IAP Haryana Chapter Conference is to be held on *December 20, 1992* at Sonapat. Free papers are invited from the members of Haryana Chapter.

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