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Letter to Editor (Pages: 7369-7370)

Neonatal Appendicitis: Difficult Diagnosis with Enterocolitis

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Dear Editor-in-Chief,

The clinical presentation of appendicitis in the newborn is nonspecific (1). No age is free from the risk of appendicitis, and the most common findings are abdominal distension, tenderness, feeding intolerance, and fever (2). Neonates with perforated appendicitis are usually diagnosed intra-operatively (3). The diagnosis was always made after surgical exploration for acute abdominal findings mimicking necrotizing enterocolitis (4). We report the case of acute appendicitis in a newborn diagnosed intraoperatively after neonatal occlusion symptoms. We describe the case of a male born at 37 weeks of gestation by spontaneous vaginal delivery. On his 47th day of life he developed an abdominal distension and feed intolerance, after 6 hours bilious vomiting was installed with fever to 38.7 °C. Our examination showed his abdomen to be distended but soft with no signs of peritonitis. We did not find any hernias or abdominal masses. His C-reactive protein (CRP) was 56 mg/L and the white blood cell count was 7750 cells/mm3. Abdominal radio-graph demonstrated gaseous distension of bowel loops in the right lower and upper quadrants. The diagnosis of enterocolitis was suspected so he was made nil per oral, a nasogastric tube was placed, blood cultures were drawn, and he was started on intravenous triple antibiotic therapy. An ultrasound showed a medium intraperitoneal effusion with dilated bowel loops. After aggravation of the general condition and of the abdominal distension, the patient was emergently brought to the operating room for exploratory laparotomy. The exploration showed that the small and large bowel was healthy and normal in appearance. His appendix was acutely inflamed (**Figure.1**). An appendectomy was performed. Histology demonstrated a pathological appendix. He was discharged home at day 52 of life and was thriving at 1- year follow-up.

Neonatal appendicitis is an extremely rare condition, with fewer than 50 cases reported in the last 30 years and just more than 100 over the last century (5). Approximately 50% of cases occur in premature neonates and a third of cases are initially diagnosed as an enterocolitis (2). As in our case the first diagnosis was an enterocolitis and the diagnosis of appendicitis was retained only after laparotomy. Acute appendicitis is rare in term neonates and his diagnosis continues to be a challenge witch need a high index of clinical suspicion.

Key Words: Appendicitis, Diagnosis, Neonate.

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Fig.1: Intra-operative picture demonstrating the pathological appendix.

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