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Intussusception in preterm infant

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Intussusception is one of the most frequent cause of acute abdomen in early childhood.Pathognomonic triad include intermitten abdominal pain, emesis and rectal bleeding. The high motality rate appear to be related to the long interval between onset of symptoms and commencement of definitive treatment.

Intussusception can also present in a subacute or chronic form with a slow and aspecific onset. Several papers have also stressed the occurrence of intrauterine intussusception during sometime in the pregnency leading to small bowel atresia.

We report here a case of intussusception in infant 30 weeks gestation intially treated as necrotizing enterocolilis. The similarity of the presentation, the value of investigation and the judgement in surgery were discussed

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ลำไส้กลืนกันในทารกคลอดก่อนกำหนด

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Intussusception เป็นโรคที่พบบ่อยในเด็กเล็กอายุระหว่าง 2 เดือน- 2 ปี ลักษณะการแสดงของโรคที่เด่นชัด คือ อาการปวดท้อง อาเจียนและถ่ายเป็นเลือดปนมูกมีลักษณะเฉพาะตัว การรักษาได้ผลดีหรือไม่ขึ้นอยู่กับช่วงเวลาตั้งแต่เริ่มแสดงอาการจนกระทั่งวินิจฉัยและได้รับการรักษา

มีผู้รายงานว่า Intussusception อาจเกิดตั้งแต่ในครรภ์มารดาทำให้ลำไส้ส่วนที่กลืนกันเน่าตาย และก่อให้เกิดลำใส้ตีบตันแต่กำเนิดในที่สุด บางรายอาจเกิดการกลืนกันในช่วงใกล้คลอดและแสดงอาการตั้งแต่ช่วงหลังคลอดใหม่ๆ

ผู้เขียนได้รายงานผู้ป่วย Neonatal Intussusception ซึ่งพบได้น้อยมากและมักได้รับการวินิจฉัยและให้การรักษาแบบ Necrotizing Enterocolitis แทบทั้งสิ้น พร้อมทั้งนำเสนอข้อสังเกตในการวินิจฉัย ประโยชน์ของการใช้ Ultrasound และ Contrast enema study และวิธีการรักษา

Neonates with abdominal distension, feeding intolerance, and rectal bleeding are frequently diagosed as having necrotizing enterocolitis (NEC). The radiologic workup is not always conclusive and adds to the difficulties in the differential diagnosis between necrotizing enterocolitis and neonatal intussusception. The resulting delay in achieving a diagnosis of intussusception can lead to serious complications.

Case report

A boy, birth weight 1050 gm, at 30 weeks gestation was born by normal labour. He developed IRDS soon after birth and was ventilated until day 20. He passed meconium oh the first day of the birth. Initially, feeding was parenteral, then enteral feedings were introduced on day 10 by nasogastric tube but bilious emesis occured occassionaly. An abdominal film showed generalized dilatalion of bowel loops. The presumplive diagnosis was NEC and he was treated by antibiotics and NG decompression, but on day[28], he passed mucous bloody stool. The abdominal roentegenography was then repeated and bowel perforation was suspected.Abdominal lavage and drainage was performed.

He remained unable to achieve adequate feedings. The repeated abdominal radiographs showed no improvement but increasing in dilatation of bowel loop and fluid levels indicating the presence of intestinal obstruction. A contrast enema revealed colitis with ulceration of colon. Then a laparotomy on day 87 after birth was done. An jejuno-jejunal intussusception was found at distance of 15 cm from I-C valve, there were no necrotic segment of the small bowel but the stenotic part at the neck of intussusceptum. The involved pathologic area was resected and primary anastomosis was done. Progress after the operation was uneventful but now the boy was developing sepsis due to lung infection and was still on intensive care unit.

Discussion

Neonatal intussusception is a very rare phenomenon. As a very result of ischemic injury secondary to intrauterine intussusception.The evident of sonographic diagnosis of intestinal obstruction at the 30 th week of gestation suggest that intrauterine intussusception maybe a cause of ileal atresia occured late in the course of pregnency.

Neonatal intususception was always misdiagnosed as NEC. After failure of conservative measure, a diagnose of intussusception was contemplated. This pitfall has been increasingly reported in more than half of the patients. Some clue to the diagnosis may include the present of marked abdominal distension without pneumatosis intestinalise and the passage of blood via the rectum without systemic signs of toxicity.However,many agree that there are no definite clinical feature to differentiate intussusception from NEC.

The clinical and radiological differentiation between NEC and intussusception is not easy. It is important to be aware of possibility of intussusception in association with NEC particulary when there is a poor respond to medical treatment. Ultrasonography can diagnosed intestinal intussusception in very ligh percentage especially in the series of Pracros et al, however this techniques has not yet been proved to be a valuable aid in distinguishing intussusception from necrotizing enterocolitis in preterm infants.

Contrast enemas may not be helpful. Some studies demonstrated microcolon in some of the patients. The ileo-ileal intussusception makes contrast study be less reliable.

Almost all studies agreed that resection of the intussuscepted segment with primary anastomotic repair leading to a good outcome. An attempt to perform hydrostatic reduction only increase risk of perforation.

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