

click intensity, polarity, number of stimuli, filter band width(6,7) and by some subject variables, especially maturation. Roberts *et al.*(8) found that most ABR failures were due to immaturity. Hence the interpretation of the ABR wave forms requires indigenous normative data and also a high level of expertise and experience(2).

6. The test is time-consuming and the equipment is expensive. The environment of the test must be free from high levels of acoustic and electrical interference.
7. Abnormal ABRs in the newborn period are often transient(4) and many infants are normal on follow up. The reverse can also be true. A normal ABR does not preclude the later development of auditory impairment. Nield *et al.*(9) reported 11 infants with normal ABR at discharge from the NICU who were later found to have significant sensorineural hearing loss. Because of these limitations, any infant who 'fails' ABR should, on follow up, undergo conventional audiometry to get a more comprehensive audiologic picture.

K.S. Gautham,  
A. Narang,

*Department of Pediatrics,  
Postgraduate Institute of Medical  
Education and Research,  
Chandigarh 160 012.*

## REFERENCES

1. Anand NK, Gupta AK, Hans Raj. BERA—A diagnostic tool in neonatology. *Indian Pediatr* 1990, 27: 1039-1044.
2. Mason S. Auditory brainstem response in pediatric audiology. *Arch Dis Child* 1988, 63: 465-467.
3. Galambos R, Hecox KE. Clinical applications of the auditory brainstem response. *Otolaryngol Clin North Am* 1978, 11: 709-722.
4. Kurtzberg D, Vaughan HG. Electrophysiologic assessment of auditory and visual function in the newborn. *Clin Perinatol* 1985, 12: 277-299.
5. Sakhrani V, Merchant R. Auditory brainstem responses in infants—An update. *Pediatr Clin India* 1989, 24: 47-551.
6. Picton TW, Stapells DR, Campbell KB. Auditory evoked potentials from the human cochlea and brainstem. *J Otolaryngol* 1981, 10 (Suppl 9): 1-41.
7. Cox LC. The current status of auditory brainstem response testing in neonatal populations. *Pediatr Res* 1984, 18: 780-783.
8. Roberts JL, Davis H, Phon GL, Reichert TJ, Sturtevant EM, Marshall RE. Auditory brainstem responses in preterm neonates maturation and follow up. *J Pediatr* 1982, 101: 257-263.
9. Nield TA, Schrier S, Ramos AD, Platzker ACG, Warburton D. Unexpected hearing loss in high-risk infants. *Pediatrics* 1986, 78: 417-422.

## Segmental Dilatation of the Ileum

Segmental dilatation of the ileum is a rare malformation usually seen at its junction with the vitelline ducts. Only 27 cases have been previously reported in the English literature up to 1985. Bell *et al.*(1) suggested the term 'ileal dysgenesis' in order to distinguish this condition of the ileum from primary vitelline duct anomalies like Meckel's diverticulum or omphalomesenteric cyst.

A 12-year-old otherwise healthy boy presented in 1986 with recurrent episodes of sub-acute intestinal obstruction for the past 15 months. Physical examination did not reveal any abnormality. Routine investigations were within normal limits. A plain X-ray of the abdomen revealed an abnormal gas shadow in the mid-abdomen. Barium meal and follow through examination revealed a normal stomach and normal passage of barium along the small intestine. A large contrast filled shadow was seen after barium had already entered the transverse colon. A communicating colonic duplication cyst was suspected. However, a barium enema done subsequently revealed no abnormality. Exploratory laparotomy was then performed.

At operation a  $11 \times 8$  cm dilated segment of ileum supplied by thick and hypertrophic blood vessels was found approximately 35 cm from the ileocaecal region. The proximal ileum was slightly dilated, the distal ileum was of normal calibre and the vasculature of the rest of the bowel was normal. No Meckel's diverticulum was found. One side and base of the dilated segment had flimsy adhesions with its mesentery. Resection and end to end anastomosis was done. The postoperative course was normal. Histopathological examination of the dilated segment did not reveal any evidence of heterotopic mucosa, ulceration, deficient innervation or abnormal musculature.

Segmental dilatation of the ileum is a rare structural abnormality. Characteristically, it is a localized dilatation of a well defined segment of ileum with a more or less abrupt transition to normal bowel proximally and distally with no evidence of obstruction or deficient innervation(2).

The etiology of this condition is not well established and the age of presenta-

tion is variable. The presence of heterotopic foregut mucosa in 18% of reported cases, association of Meckel's diverticulum in 19% of cases and association of other structural anomalies like malrotation and midline defects in 42% cases suggest a congenital cause.

The mode of presentation may be as neonatal intestinal obstruction, anaemia and fatigue, acute intestinal obstruction or features of sub-acute intestinal obstruction. In the case under review the symptoms could have been produced by transient faecal impaction of intermittent axial twist of a top-heavy dilated loop as suggested by adhesions between the dilated segment and its mesentery. Pre-operative diagnosis can be made only if contrast radiographic studies demonstrate the dilated ileal segment. Curative management consists of resection and end to end anastomosis.

Thus, while segmental ileal dilatation is an uncommon entity, it should be considered in the evaluation of patients with unexplained abdominal pain, persistent anaemia or fatigue and should also be kept in mind as a rare cause of intestinal obstruction.

**R. Chadha,  
V. Bhatnagar,  
A.K. Gupta,  
D.K. Mitra,**

*Departments of Pediatric Surgery  
and Radio-Diagnosis,  
All India Institute of Medical Sciences,  
New Delhi 100 029.*

#### REFERENCES

1. Bell MJ, Ternberg JL, Bower RJ. Ileal dysgenesis in infants and children. *J Pediatr Surg* 1982, 17: 395-399.
2. Irwing IM, Lister J. Segmental dilatation of the ileum. *J Pediatr Surg* 1977, 12: 103-112.