Meckel's diverticulitis causing intestinal obstruction in a 3 month old infant

Sir,

A3-month-old male presented with bilious vomiting and abdominal distention since 15 days. On examination, vitals were stable and abdomen was distended with visible coils of intestines and his blood counts, urea, creatinine, sodium, and potassium were normal. Abdominal X-ray revealed multiple fluid levels suggestive of intestinal obstruction [Figure 1]. Emergency laparotomy showed acutely inflamed Meckel's diverticulum (MD) and the tip was adherent to mesentery acting as a band around which a loop of ileum had undergone volvulus with gangrenous changes [Figure 1]. The gangrenous ileal loop with MD was resected and end- to -end anastomosis was done. Histopathology showed features of acute inflammation of MD. MD is the most common encountered congenital anomaly of the small intestine, occurs in 2%.^[1] MD is frequently diagnosed as an incidental finding during a surgical procedure performed for other reasons and most patients are asymptomatic.^[1,2] Symptomatic is virtually synonymous with complications.^[2] The life time risk of complications is was 4-6% and may present



Figure 1: Abdominal X-ray revealing multiple fluid levels suggestive of intestinal obstruction and acutely inflamed Meckel's diverticulum with ileal volvulus with gangrenous changes

at any age with most of complications occurring in adults.^[1,3] Bleeding is the most common complication occurring in children and most adults present with obstruction, diverticulitis or both.^[2]MD occurs in 10-20% of symptomatic patients and is more common in older patients.^[1,2] Meckles diverticulitis can lead to adhesions, which can cause intestinal obstruction.^[2] In our case, inflamed MD tip was adherent to mesentery acting as a band around which a loop of ileum had undergone volvulus with gangrenous changes. In children, intestinal obstruction is observed in 20-25% of all symptomatic MD.^[2] Age wise analysis reveals that bleeding is common in children less than 2 years and intestinal obstruction being the most common among adults although some studies have found reverse.^[1-4] Out of 36 symptomatic pediatric cases, 44.4% presented with bleeding and only 14.7% with intestinal obstruction in a study by Sai Prasad et al.^[5] In Mayo clinic study out of 1476 MD patients, only 16% were symptomatic. Among them 76% were adults and 24% were children. Among symptomatic children, 40% had obstruction and 31% had bleeding.^[4] In conclusion, even though, the complications of MD such as diverticulitis and intestinal obstruction are rare in children, they should be kept in mind in the differential diagnosis of small bowel obstruction.

Kalenahalli Jagadish Kumar, Mathod Ganeshrao Anil Kumar¹, Pocha Shyamala, M. Prashanth Kumar¹ Departments of Pediatrics and ¹Pediatric Surgery, JSS Medical College, JSS University, Mysore, Karnataka, India

Address for correspondence: Dr. K. Jagadish Kumar, 85/B, 9th Cross, Navilu Road, Kuvempu Nagar, Mysore, Karnataka, India. E-mail: jagdishmandya@gmail.com

REFERENCES

- Sharma RK, Jain VK. Emergency surgery for Meckel's diverticulum. World J Emerg Surg 2008;3:27.
- Kuwajerwala NK. In: Geibel J, editor. Meckel Diverticulum. Available from: http://www.emedicine.medscape.com/ article/194776-overview [Last updated on 2011 Dec 19].
- 3. Sharples AJ. Meckel diverticulum causing small bowel obstruction. BMJ Case Rep 2010;2010.
- 4. Park JJ, Wolff BG, Tollefson MK, Walsh EE, Larson DR. Meckel diverticulum: The Mayo Clinic experience with 1476 patients (1950-2002). Ann Surg 2005;241:529-33.
- 5. Sai Prasad TR, Chiu CH, Singaporewalla FR, Ong CP, Low Y, Yap TL, *et al*. Meckel's diverticular complications in children: Is laparoscopy the order of the day? Pediatr Surg Int 2007;23:141-7.