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Adult intestinal malrotation: 24 year experience from a tertiary centre

**Background:** Malrotation of the intestine results due to incomplete or failure of rotation of the gut during fetal development and it rarely presents in the later life therefore it is less commonly reported and studied. It is crucial that all surgeons operating on adult patients have an understanding of not only adult malrotation and its various manifestations, but also have a firm grasp of intestinal embryology and its anatomic variations.

**Aim:** To review diagnosis and surgical management of adult patients with intestinal Malrotation which presented to our institute.

**Methods:** A retrospective review of the surgical outcome of adults with intestinal malrotation was performed. Twenty patients were observed and treated between November 1984 and January 2018 (8 women and 12 men; the mean age of the patients was 40 years) at Aga Khan University Hospital, Karachi. Patient demographics, surgical outcomes, including perioperative morbidity and mortality were measured.

**Results:** Most of the patients were symptomatic at the time of presentation. Abdominal pain was the most frequently occurring symptom. CT scan abdomen was done in 14 patients. In 5 of these patients diagnosis was missed. 8 patients had upper GI contrast study. 16 patients underwent laparotomy and four were managed conservatively. Follow-up ranged from 2 to 52 months. Two patients had post-operative complications: both had adhesive obstruction and were managed conservatively in both the cases. No deaths occurred as a result of surgical intervention in the first 30 day period.

**Conclusions:** Intestinal malrotation is a rare but important cause of abdominal pain in adults. Patients may present with variety of nonspecific clinical symptoms and signs. Successful management includes early diagnosis and appropriate management.