Abstract:
Small bowel volvulus (SBV) is a rare cause of intestinal obstruction, but life-threatening surgical emergency. In most of the cases require early diagnosis and treatment for a favourable outcome. The causes include bands, adhesions or internal hernia. Central abdominal pain, resistant to narcotic analgesic should raise the suspicion of the diagnosis of SBV and need vigorous management to reduce the morbidity and mortality. The surgical options for SBV consists of derotation, with or without fixation, and resection with anastomosis. A 56 year lady with central abdominal pain with features of small intestinal obstruction, was admitted as an emergency. The patient was investigated and found to have volvulus of ileum, which was gangrenous, and was resected and primary anastomosis done. The post operative period was uneventful.

Keyword: Small bowel volvulus, gangrenous ileum, band

INTRODUCTION:
Small bowel obstruction is a common cause of emergency surgical admission. The common causes include adhesions and hernias. Volvulus of the small bowel is an infrequent cause. Early detection and treatment carries a better prognosis. Volvulus is a closed loop mechanical obstruction, in which both ends of the involved intestinal segment are obstructed, with a consequent increase in intraluminal pressure secondary to increased intestinal secretion and accumulation of fluid in the involved segment, results in a much higher risk of vascular compromise and irreversible intestinal ischemia, finally strangulation occurs. The strangulation is either reversible, or irreversible, when the vascular obstruction has caused irreversible ischemia of the bowel that will progress to gangrene.
CASE REPORT:
A 56 year old lady of manual labourer presented with complaints of central abdominal pain, vomiting, fever and distension of abdomen for four days. She had no past history of similar illness or any surgery. Patient was not a case of tuberculosis/ischemic heart disease. On general examination, she was moderately built and dehydrated with pulse rate of 98 per minute with blood pressure of 90/70mmHg. Other system examinations were within limits. Abdominal examination showed distension with generalized and rebound tenderness, guarding with diminished bowel sounds. Rectal examination was normal. Patient was put on Ryle’s tube aspiration which showed bilious content. Blood investigations showed normal haemoglobin and blood urea, normal other parameters except for hypokalemia and hypochloremia. X Ray abdomen erect showed multiple air fluid levels. Ultrasonogram of abdomen showed adynamic loops of distal ileum and dilated proximal loops, suggestive of acute small bowel obstruction. With the above clinical features, patient was diagnosed as a case of small bowel intestinal obstruction and emergency laparotomy was done. On opening the abdomen, there was a volvulus of the small intestine of about 30 cm length, about 10 cm proximal to the ileocaecal junction. The affected part was distended and gangrenous. The gangrenous part was transected and the continuity was restored by end to end anastomosis. Post operative period was uneventful.

DISCUSSION
The common causes of small bowel volvulus are bands, adhesions and internal hernia. Other causes include ascariasis Meckel's diverticulum and change in dietary pattern in Muslims during Ramalan fes.
tival who have eaten large quantities fibre after prolonged fasting. Small bowel volvulus presents with classical features of intestinal obstruction. The outstanding symptom is central abdominal pain, the severity is directly related to the duration of vascular compromise. The diagnosis should be considered, if the pain does not respond to narcotic analgesic. Peritoneal irritation is marker for urgent laparotomy. No single diagnostic clinical sign consistently identifies the presence of the infarcted bowel. Laboratory tests are often not conclusive. Although the haematocrit, serum liver enzymes, amylase and lactate dehydrogenase are frequently raised, they do not show a consistent correlation with SBV. A White cell count, greater than 18,000/cmm has been shown to be correlated with presence of gangrenous bowel. Muchas et al. in their series, showed a 55% hyperamylasaemia and abnormal serum lactate levels in 86% of patients with gangrenous small bowel, in those with other causes of small bowel obstruction. The plain abdominal radiography in SBV shows nonspecific features of small bowel obstruction with either distended loops or a featureless. The surgical options for SBV consist of derotation, with or without fixation, and resection with Anastomosis. In the presence of gangrenous bowel almost all authors recommend resection, with or without primary anastomosis. However, the best treatment for non-gangrenous SBV is uncertain. Simple derotation carries a high risk of recurrence, while fixation of the torted small bowel is technically difficult due to the length and anatomy of the small bowel. The obvious risk of resectional surgery is the development of short-gut syndrome, which arises from a substantial loss of small bowel length. The outcome of SBV is dependent on the speed of diagnosis leading to surgical intervention. The mortality rates of non-gangrenous SBV range from 5.8% to 8%. Mortality rates for gangrenous SBV, however, vary from 20% to 100%. The overall mortality rate for all cases of SBV range from 10% to 35%. CONCLUSION Prognosis depends upon early diagnosis and surgical intervention. If the small bowel volvulus is due to bands or adhesions, excision of bands, release of adhesions are the main treatment. If the bowel has become gangrenous due to volvulus, resection and primary anastomosis is the treatment of choice.

REFERENCES:


