CASE REPORT

Acute mesentric ischemia presented with mild abdominal pain, vomiting and diarrhea

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Abstract:
Mesentric ischemia is also known as mesenteric vascular disease, is a medical condition in which injury to small intestine occurs due to deficient blood supply to small or large intestine. It can occur suddenly known as acute mesenteric ischemia or has agradual onset known as chronic mesenteric ischemia. Acute disease usually present with severe abdominal pain Thromboembolic disease is common in westeren world. It is rare in Pakistan, middle east countries and Kingdom of Saudi Arabia.

We present a case of 68 years old lady who has known history of atrial fibrillation, who presented to our hospital with history of vague abdominal pain, vomiting and diarrhea, initially admitted under physician as patient did not settled therefore surgical opinion taken.
Patient underwent laparotomy, patchy small bowel gangrene was found. The involved segment resected and end to end anastomosis performed. Patient had slow but smooth recovery and sent home on 9th post operative day.
Conclusion: Acute mesenteric ischemia is a rare condition, one should have high index of suspicion to diagnose such condition so edequate treatment can be given timely to save the patient.

Key words: acute mesenteric ischemia, thromo embolism of superior mesenteric artery, ischemic gangrene of bowel

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Introduction:
Acute mesenteric ischemia is not a common condition. Acute mesenteric ischemia affects 5 per 100,000 people in the developed world[1]. It can occurs suddenly due to sudden occlusion of superior mesenteric artery or its branches or it can present gradually due to slow and gradual obstruction of the vessels known as chronic vascular ischemia[3]. Acute disease often presents with sudden severe pain[4]. The risk factors are atrial fibrillation, heartfailure, chronic renal failure,previous myocardial infarction[2]. Mesenteric ischemia can also occur due to blood clot form elsewhere in the body and lodges in the superior or mesenteric vessels or its branches, a new clot form in the artery, blood clot form in the mesenteric vein and insufficient blood flow due to low blood pressure or spasm of the arteries.[5]

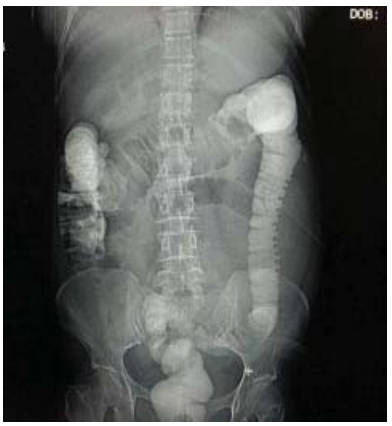
Treatment of acute ischemia may be by stenting and local instillation of streptokinase to breakdown the clot at the site of obstruction or laparotomy and removal of involved gangrenous bowel.

Treatment of acute ischemic may be by stenting or medication to breakdown clot thrombi at the site of obstruction by interventional radiologist and laparotomy and removal of involved segment.

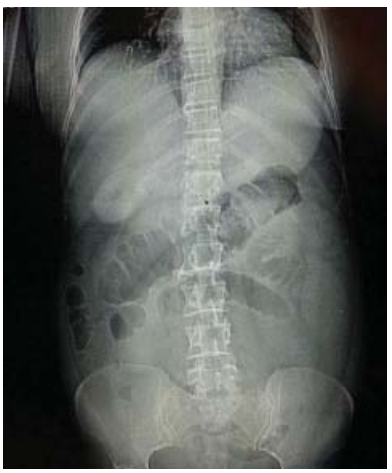
Case report:
Case of 68 year old lady presented to King Abdullah Hospital, Bisha with history of in-

termittent abdominal pain, diarrhea, she has a known history of atrial fibrillation. On examination, patient was vitally within normal limit and apyrexial. Abdomen on initial examination was soft not distended, gut sound feebly audible. Ultrasound has no positive finding. CT scan suggestive of dilated bowel loops with suspicious clot in the superior mesenteric vessels.

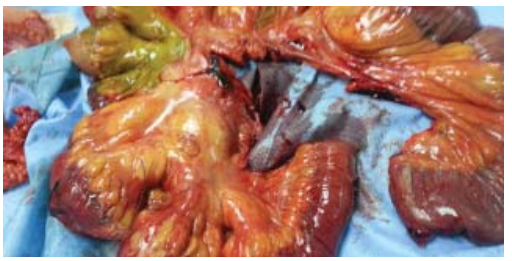
As the patient did not show a sign of improvement, laparotomy was performed. Laparotomy finding patchy gangrenous involvement of small bowel starting approximately 1 foot from duodenal jejunal flexure involving about three forth of small bowel. The small bowel seen normal approximately 1 foot from ileocecal junction. All gangrenous portion excised and side to side stapled anastomosis of small bowel performed. Patient has shown smooth improvement from surgery and later developed wound infection. Patient recovered and allowed home on 9th postoperative day.



x-ray abdomen showing dilated small bowel loops



Barium enema of the patient showing contrast reaching the ilieo caecal area and small bowel loops are not visualized



Resected specimen showing patchy gangeren of small bowel. Showing areas of dusky discoloration

Discussion:

Mesenteric ischemia is an uncommon cause of abdominal pain. The risk factors are known history of atrial fibrillation, heart failure, chronic renal failure, previous myocardial infarction[2], mesenteric ischemia can occur following open heart surgery. Other causes are thrombophilic states like Antithrombin III deficiency of protein-C deficiency, protein-S deficiency and deficiency of factor 5 and as well as advanced malignant states[7,8]. To diagnose acute mesenteric ischemia disease early is directly proportional to the severity of disease i.e. number of vessels involved whether main trunk of branches of the superior mesenteric vessels involved.

Routine blood tests are usually not helpfull. The increased serum lactate level of metabolic acidosis sometimes useful but usually a late finding. Abdominal x-ray are abnormal in 50-75% of cases showing dilated bowel loop but not specific for bowel ischemia. Semi opaque indentation of the bowel lumen (thumb printing) are indicative of mucousal edema where as gas in the wall of the bowel (pneumatosis intestinalis), portal vein and free peritoneal air are characteristics of bowel infarction[9,10].

Transabdominal colon Doppler ultrasound is also useful in experienced hand but computerized tomography (CT Angio) is the investigation of choice to detect mesenteric ischemia[11].

Treatment is by interventional radiological and local injection of streplokinese if the disease is detected early or otherwise patient needs laparotomy and resection of involved bowel sigmoid.

Conclusion:

Mesenteric vascular occlusion is a rare clinical condition. We have high index of suspicion to diagnose such cases as detected early, the diseases has good prognosis in the cases discovered late mortality of 70-90%.[5,3]

Conflict of Interest: None

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