

Chronic Intestinal Ischemia with varied Presentations: A Case Report

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Abstract: Acute or chronic intestinal can be the result of many different pathophysiological processes. Presentation may be benign to life threatening, if not recognized swiftly. We present two cases of chronic intestinal ischemia with varied presentation resulting in hypoplasia of the intestinal wall with smooth serosa in one & hyperplasia of the intestinal wall in the other. Both patients underwent physical examination, blood analysis, X-Ray chest, abdomen & selective superior mesenteric arteriography (SMA). One patient showed filling defect at the root of SMA with poor blood flow and occlusion at the distal ileocolic artery suggestive of acute embolism of SMA with no bowel necrosis. Thrombosis was attached to the wall of SMA with 40- to -60 cms long ileum of sausage consistency and cyanotic at about 50cm from the caecum. In the other patient angiography showed an occlusion of SMA and formation of a huge Riolan's arch. The intestinal wall was like paper-thin. In one patient surgical embolectomy of the SMA and resection of disease, segment of ileum with end-to-end anastomosis was carried out. In other patient, an aorto-superior mesenteric bypass was done and the pulsation of the SMA returned. Postoperative recovery of both the patients was uneventful.

Keywords: Intestinal ischemia, Small bowel ischemia

INTRODUCTION

The diagnosis on intestinal ischemia begins with the ability of the clinician to suspect and recognize it. The clinical history of abdominal pain and non specific findings may be misleading. However, common clinical conditions should be quickly excluded and mesenteric vascular disease aggressively pursued, traditionally, conventional angiography has been regarded gold standard imaging method. Approximately 90% of patients with acute mesenteric ischemia who undergo angiography before the onset of peritoneal signs survive, demonstrating the value of angiography and early diagnosis. Advantage of angiography includes the ability for concomitant endovascular treatment. Multiple therapeutic approaches are available for intestinal ischemia, depending on acuity and extent of disease. Resection of infarcted bowel as well as embolectomy can be accomplished during surgery.

CASE 1

A 65 years old male was admitted to our hospital due to severe acute abdominal pain, nausea without vomiting for 3 days in Feb 2004. On examination abdomen was soft, and bowel sounds were present. The white cell count was 11,200/cmm, LDH 433 IU/L and Plain Abdomen X/Ray revealed intestinal distension in the right half of abdomen. Stool was positive for occult blood. He did not give past history of intermittent abdominal pain. Diarrhea, constipation, weight loss or diabetes. He had atrial fibrillation for 8 years. Selective superior mesenteric arteriography showed filling defect at its root with poor blood flow and on occlusion at the distal ileocolic artery. Collaterals between the common hepatic artery and SMA could be seen (fig 1a). a diagnosis of acute mesenteric embolism was made and before surgical SMA embolectomy, laparoscopy was planned, which showed no bowel necrosis. Patient did not consent for surgical embolectomy and was managed conservatively with 2,50,000 IU of urokinase perfusion via the angiographic catheter inserted into the SMA for angiography and the catheter was withdrawn. He was discharged on 10th day of admission.

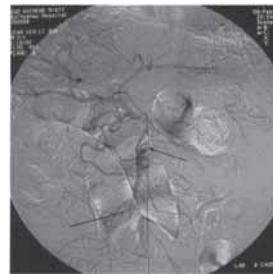


Fig 1a. Superior mesenteric arteriography with filling defect at its root and an occlusion of the distal ileocolic artery. Collaterals between hepatic artery and SMA seen.



Fig 1b. Intestinal wall hypertrophy with mesenteric involvement and narrow lumen.

After 6 days, he was readmitted with intolerable abdominal pain for nearly 16 hours. He was febrile. X-Ray abdomen showed multiple air fluid levels. This time, again he was managed conservatively in hospital for 3^{1/2} months. He lost 13 kg of weight. This time patient's family agreed for surgical embolectomy surgical embolectomy showed thrombus with partial fibrosis attached to the wall of artery. Approximately 40-60 cms long ileum sausage like-in consistency, cyanotic in color with smooth serosa at about 50 cm proximal to Caecum was found. Proximal intestine was slightly dilated, no other intestinal and peritoneal lesions were found. The diseased segment of ileum was resected with end-to-end anastomosis.

The removed ileum was markedly thickened, hypertrophied without irregular appearance and with a much-narrowed lumen (fig 1b). On histopathology "an usual widening in the layers of sub mucosa and serosa with fibrous proliferation and cell infiltration mainly lymphocytes and plasma cell.

The patient had an uneventful recovery and was discharged after 10 days. Follow-up six months later he was completely asymptomatic

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and had gained 12 kg weight.

CASE 2

Another patient 69 years old woman had repeated abdominal pain and lower gastrointestinal bleeding for one and half year. She was anemic (Hb 4g %) and had lost 8 Kg weight. Angiography showed an occlusion of SMA and formation of a huge Riolan's arch. During surgery, intestinal wall was found thin like layers of paper in some areas, light of colonoscopic illumination could easily be seen from the lumen of thin layer intestine. After aorto-SMA bypass, the SMA pulsation could be felt and seen. Postoperative recovery was uneventful. She became asymptomatic, gained 5 Kg weight. Hemoglobin rose to 10G% at 4 weeks and was discharged.

DISCUSSION & CONCLUSION

Arterial insufficiency or ischemia produces the target tissue or organ hypoplasia even necrosis as in our case of mesenteric insufficiency and remarkable hypoplasia of the intestinal wall¹.

The variable vessels involved. Location of bowel affected, and different levels of acuity of illness all result in multiple possible presentations. The detection of such a serious condition can be a diagnostic and therapeutic dilemma². The varied presentation seen in the two cases where in one had hypoplasia and the other had hyperplasia is rather perplexing. Could this be related to the rapidity of onset, duration and degree of ischemia? Could it be that different layers or parts of layers of intestine behave differently to ischemic insult?

Emboic occlusion of the superior mesenteric artery occurs in more than half of all cases³. Most emboli originate in the heart and are potentiated by cardiac arrhythmias or depressed systolic function

due to ishaemic heart disease. In our case, unnecessary delay increased morbidity of the patient though this patient was lucky to have uneventful recovery after surgery.

Mesenteric ischemia most often results from SMA embolization or thrombosis, and less commonly, venous occlusion or nonocclusive process. Remobilization of the SMA accounts for nearly 50% cases, with thrombosis responsible for another 25% of cases^{4,5}. In our case, perhaps atrial emboli were responsible.

Conservative treatment with thrombolytic therapy did not help our patient. In fact, unnecessary delay could have jeopardized patient's survival. In most cases, as in our both cases surgical exploration was emergently performed to restore intestinal arterial flow and resect irreparably damaged bowel. Very thin ischemic bowel in second case is in contrast to the first case where ischemic bowel segment was remarkably thickened or hypertrophied with smooth and normal serosa without any other lesions. We fail to understand as to why is two cases where same etiology of mesenteric ischemia could lead to different pathological processes?

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Case Report

Ileal Carcinoid Tumor mimicking Carcinoma Cecum.

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Abstract: We report a 28-year old female admitted to the surgical ward with pain and lump in right lower abdomen; on careful examination and investigation a presumptive diagnosis of carcinoma caecum was made. A standard right hemicolectomy was done. However, the histopathological report demonstrated carcinoid tumor in the ileum with free resection margins. Immunohistochemistry confirmed the diagnosis of carcinoid tumor ileum. **Keywords:** Carcinoid tumors, carcinoid syndrome, 5HIAA.

INTRODUCTION

Historically, the term carcinoid was first coined by Oberndorfer in 1907¹. The prevalence of carcinoid tumors is expected to be around 0.5 per 100,000, although autopsy studies suggest that it may be as high as 2 per 100,000². In the great majority of cases, carcinoids remain silent. Symptomatic carcinoids declare either through their mass effect (pain, luminal obstruction) or secretory products. Carcinoid syndrome consists of a constellation of symptoms which arise as a result of massive release of serotonin and neuropeptides directly into the systemic system³. It has been observed that patients with carcinoids have an increased risk of

developing secondary neoplasms⁴. Urinary 5-HIAA measured in a 24-hour urine sample is the most frequently applied test in the endocrine work-up of the carcinoid tumors⁵. Chromogranin A, a glycoprotein secreted by the neuroendocrine cells, has 80% sensitivity to carcinoids and serves as a valuable marker in the early detection of recurrences and during follow-up after the primary treatment⁶. Carcinoids frustrate the physicians by the complex symptoms and varied biochemical affections and demand a high index of suspicion. Surgery is the treatment of choice for such lesions, and patients should be follow-up with serial urinary 5-HIAA assays and somatostatin receptor imaging, where available.

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