

## Haematochezia from a Splenic Artery Pseudoaneurysm Communicating With Sigmoid Colon: A Case Report

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### Abstract: Introduction

- Splenic artery aneurysms (SAA) are the third most common intra-abdominal aneurysm[1].
- Complications include invasion into surrounding structures often in association with preexisting pancreatic disease.
- Traditionally, treatment of SAA was through surgery, but endovascular therapy is now established with minimal morbidity and mortality[2].
- Here by presenting a successful endovascular management of a splenic artery pseudoaneurysm, with a fistula between the pseudoaneurysm and the sigmoid colon in a patient with coexisting chronic pancreatic disease[3].

Results: - Post procedure patient doing well. At 2 months follow up patient is symptom free.

**Conclusion:** - Patients presenting with haematochezia on a background of pancreatic disease should immediately alert the physician to the possibility of splenic artery aneurysm or pseudoaneurysm, complicated by gastrointestinal involvement.

Keywords:-Splenic Artery Pseudoaneurysm, Sigmoid Colon, Fistula, Hematochezia

### Case Report

- A 57 year old male presented with pain abdomen since 2 to 3 months and blood in stools of about 5 to 6 episodes not associated with any significant history. He is nonsmoker and no history of alcohol intake.
- On examination he was moderately built and nourished. Abdomen was soft with tenderness in epigastric region radiating back. No organomegaly.
- On digital rectal examination the rectum was empty with no masses and no perianal disease. Dark blood was noted on the glove with no clots.

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### I. Investigation; Colonoscopy

- Sigmoid colon showed an area of erythematous mucosa with erosions and a single fistulous opening and normal rectum:- Sigmoid fistula( from pancreatic pseudocyst +? Pseudo-aneurysm)

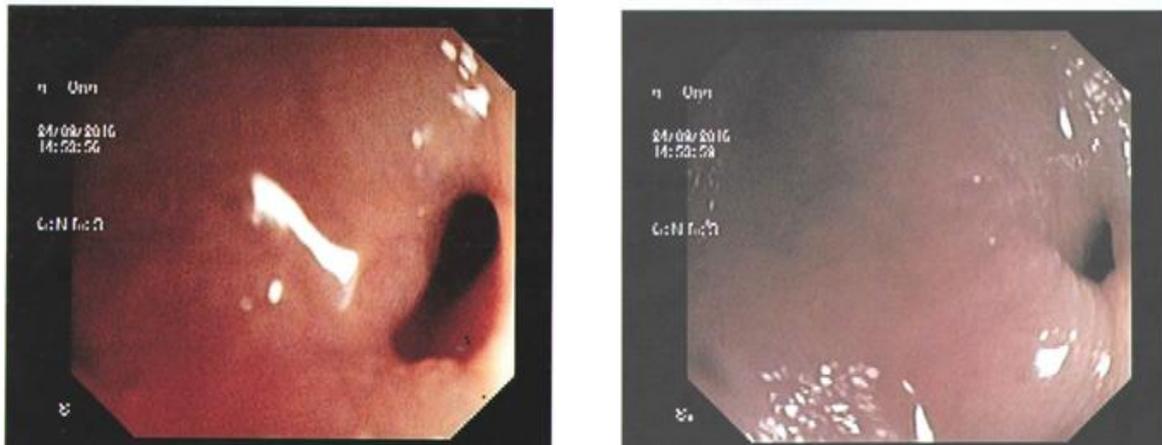


Fig 1:Colonoscopy Showing Sigmoid Colon Fistula

## II. Investigation

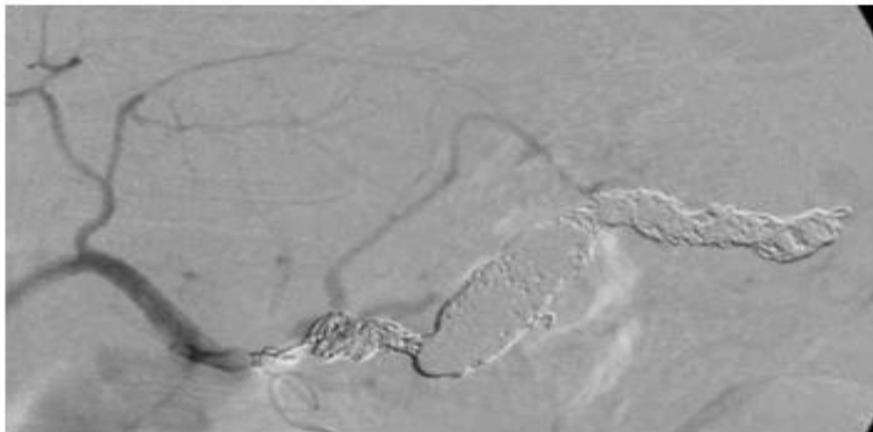
- CT angiography showed pseudoaneurysm at splenic hilum with surrounding thrombosis and peripherally enhancing fluid collection to inferior pole of spleen abutting splenic flexure of colon with a fistulous tract



**Fig 2:** CT Angiography Showing The Splenic Artery Pseudoaneurysm

## Treatment

- Radiology consult was taken and the pseudo-aneurysm was embolised endovascularly[4,5] with fibrin glue. Post procedure patient recovery was uneventful.



**Fig 3:** CT Image showing Post Endovascular Fibrin Glue Repair Procedure

## III. Discussion

- Visceral artery aneurysms are rare and reported prevalence varies from 0.1 to 10.4%. SAA are the most common type, accounting for 30%–60% and is the third most common abdominal aneurysm.
- 20% of SAA are symptomatic and 80% incidental findings[6]. Intervention is recommended for SAA that are symptomatic, increasing in size, found during pregnancy (or in child bearing years), of diameter  $\geq 2$  cm (or any size in case of a pseudoaneurysm), as these factors have been described as increasing the risk of rupture.
- Invasion into the stomach, duodenum, pancreatic duct and colon[7,8] can result in gastrointestinal bleeding and up to 13% of ruptured SAA have been described as fistulate with these structures.
- CT angiogram and colonoscopy might be useful investigation in these cases.
- Complications of interventional techniques as treatment include thrombosis or embolism resulting in organ abscesses and infarction, coil migration, aneurysm recurrence, and local arterial access complications.

## IV. Conclusion

- Splenic artery aneurysms and pseudoaneurysms are rarely encountered in routine practice.
- Patients presenting with haematochezia on a background of pancreatic disease should immediately alert the physician to the possibility of splenic artery aneurysm or pseudoaneurysm.
- Cases of rectal bleeding caused by SAA or pseudoaneurysm communicating with the colon present a diagnostic challenge. This highlights the importance of prompt CT angiography, especially if upper and lower gastrointestinal endoscopy fails to identify the cause.

- This case describes a splenic artery pseudoaneurysm with sigmoid colon involvement in a patient with chronic pancreatitis, managed successfully without open surgery.

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