

Clinical Image

Hematochezia in a Liver Transplant Recipient with Incisional Hernia Repair

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Questions

- What is the diagnosis?
 - Ingested foreign body
 - Undigested food
 - Foreign body inserted from anus
 - Colonic varix
 - Mesh erosion into colon
- What hernia repair technique is most likely to be associated with this complication?
 - Intraperitoneal placement of polypropylene mesh
 - Intraperitoneal placement of polyglactin mesh
 - Pre-peritoneal placement of polypropylene mesh
 - Retro-rectus placement of polypropylene mesh
 - Polypropylene mesh overlay technique
- What is the preferred treatment?
 - Observation only
 - Open Repair with partial colectomy and excision of mesh
 - Laparoscopic Repair with mesh excision and primary colon repair
 - Total colectomy and ileostomy

Answers

- What is the diagnosis?

The correct answer is e. Mesh erosion into colon. The patient had a remote liver transplant complicated by a large incisional hernia. The hernia was repaired with polypropylene mesh placed in the pre-peritoneal position which eroded into the transverse colon several years after the repair (Figure 1).



Figure 1: Photo taken during colonoscopy. Location is transverse colon in liver transplant recipient with remote mesh hernia repair.

- What hernia repair technique is most likely to be associated with this complication?

The correct answer is a. Intra-peritoneal placement of polypropylene mesh. Intra-peritoneal placement of polypropylene mesh is associated with late erosion into visceral structures and has been well described. If intra-peritoneal placement cannot be avoided, absorbable or biologic mesh is preferred although would be expected to have higher recurrence rates. Optimal placement is in the pre-peritoneal space or in the retro-rectus space. Mesh overlay is an option but has higher infection and recurrence rates.

- What is the preferred treatment?

This question does not necessarily have a “correct” answer as care must be individualized depending on patient condition and site of erosion. Answer c. Laparoscopic Repair with mesh excision and primary colon repair is unlikely to be achievable due to expectation of dense, extensive adhesions and in addition would be expected to have a higher complication rate from primary colon repair. Optimally, segmental excision of the affected colon segment with primary repair would be desired and given the contaminated field biologic or bio-absorbable mesh would be the best choice for abdominal wall reconstruction. Choice d. might be necessary in worst case scenarios if a large mesh repair was previously done and involving a large portion of the colon with dense adhesions. In our case, the patient had decompensated cirrhosis several years out from his transplant and he was felt to have excessive expected mortality from operative repair. Therefore observation alone was chosen. He had small periodic bleeding episodes occurring once or twice a month before he died due to complications of his cirrhosis several months later.