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COLONIC DIVERTICULAR BLEEDING-A DIAGNOSTIC DILEMMA

General Surgery

Dr.S.Mohammed Nishar Postgraduate, Institute of General Surgery ,Madras medical college,Chennai.

Dr.Kalaiselvi* Assistant Professor,Institute of general surgery.Madras medical college, Chennai
*Corresponding Author

Prof.Dr.P. Thangamani Professor,Institute of general surgery,madras medical college,Chennai

Prof.Dr.R.Kannan Professor,Institute of general surgery,madras medical college,Chennai

ABSTRACT

Diverticular hemorrhage is the most common cause of lower gastrointestinal bleeding . The majority of diverticular bleeds will spontaneously resolve; however, 20% of patients will require therapeutic interventions to obtain hemostasis. Traumatic forces within the lumen of the diverticulum leads to segmental weakening of the associated vasa rectum. Although diverticulosis coli is most commonly found in the left colon of Westernized populations, bleeding from diverticulum can occur from anywhere in the colon.

KEYWORDS

Introduction:
Despite advances in diagnostic and therapeutic technology, 10 to 25% of cases of lower gastrointestinal bleeding will require surgical intervention. Hemodynamically unstable patients who do not respond to resuscitation represent the rare surgical emergency in the management of lower gastrointestinal bleeding and should be taken expediently for exploration. In these patients, intraoperative attempts to identify an obscure source of bleeding must be made.Here we present a case of right sided colonic diverticulitis with bleeding.

Case report:
30 years female was admitted elsewhere with
C/O abdomen pain in RIF region- 3 days
H/O nausea – 3 days
No h/o vomiting/ fever/ abdomen distension/ hematemesis/ malena
Patient was clinically diagnosed to have acute appendicitis.
Emergency open Appendicectomy was done via Mc Burneys incision .

Intra operative findings :
Appendix inflamed ,Caecal thickening present,Straw coloured fluid of 1 litre drained and DT kept.
POD#0 uneventful
POD#1 – Pt had decreased urine output.
POD#3 - Pt developed abdomen distension ,increased DT output serous in nature around 700ml.
Patient developed breathlessness and Signs of shock

Patient was referred to Rajiv Gandhi government general hospital, general surgery department as ? Septic shock/? TB peritonitis.

Patient was admitted with the following complaints:
Abdominal distension- 3 days since surgery.
Vomiting- 2 days, multiple episodes, bilious, Decreased urine output, Breathlessness.
Increased DT output – serous fluid ,more than 700ml /day.

General examination:
Conscious ,Oriented ,Afebrile,Dehydration +,Pallor+,Dyspneic, Tachypneic, B/L pitting pedal edema.

Vitals:
Temperature- normal,Pulse- 106/min,BP- 80/60 mmHg with noradrenaline and dopamine support,SpO2- 100% in 12L O2.

Investigations:
Cect abdomen:Ascites,Caecal wall thickening +,Pulled up caecum. Impression: ileocaecal TB/?TB peritonitis

CT chest: b/l moderate pleural effusion. B/l ICD inserted.straw coloured fluid of 200ml drained on both sides.Started on CAT 1 ATT drugs advised by thoracic physician.

Pleural fluid analysis:
ADA- normal
Acid fast bacilli- negative.
Gene expert- MTB not detected.

Ascitic fluid analysis:
Cytology: inflammatory pathology
AFB : negative.
Pt started on oral diet at POD#8
On POD #10 Pt complained of sudden onset of bleeding per rectum with passage of clots around 300ml
Digital rectal examination- blood stain with clots+
Haemoglobin drop from 10gm/dl to 4gm/dl
3 units of PRBC was transfused.

Medical gastro enterology opinion obtained , advised colonoscopy/ urgent CT angiogram.
CT angiogram- normal study
Bleeding per rectum persists.

Colonoscopy was done: Scope passed up to splenic flexure ,Lots of blood clots, Rest of the bowel not screened.

Fig1: colonoscopy shows blood clots.

Emergency exploratory laparotomy was done and following Intra op findings noted.

- Growth of size 6x5 cm noted in the hepatic flexure
- Distended ascending colon
- Caecum and ascending colon congested
- Distal ileum distended
- Post Appendicectomy status
- Solid organs normal

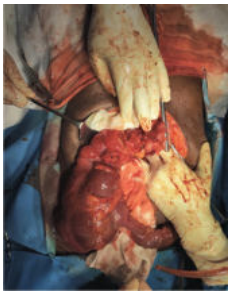

Fig2: Intra op pic showing dilated caecum

Fig3: right hemicolectomy specimen
Fig4:caecal diverticulum with bleeding

Histopathology report: chronic inflammatory pathology – diverticulitis

Discussion:

Diverticulum-mesenteric side -areas of relative weakness in the bowel where small arterioles (vasa recta) penetrate the muscular layers as they traverse the colon wall.

This results in the protrusion of the mucosa and submucosa through the layers of muscle, termed a pseudodiverticulum or false diverticulum Diverticular bleeding is a common cause of lower gastrointestinal hemorrhage.

Patients typically present with massive and painless rectal hemorrhage. Patients may need intravenous fluid resuscitation with normal saline or lactated Ringer's solution, followed by transfusion of packed red blood cells in the event of ongoing.Diverticular hemorrhage resolves spontaneously in approximately 80 percent of patients. If there is severe bleeding or significant comorbidities, patients should be admitted to the intensive care unit. The recommended initial diagnostic test is colonoscopy, performed within 12 to 48 hours of presentation and after a rapid bowel preparation with polyethylene glycol solutions. If the bleeding source is identified by colonoscopy, endoscopic therapeutic maneuvers can be performed. These may include injection with epinephrine or electrocautery therapy. If the bleeding source is not identified, radionuclide imaging (i.e., technetium-99m-tagged red blood cell scan) should be performed, usually followed by arteriography. For ongoing diverticular hemorrhage, other therapeutic modalities such as selective embolization, intra-arterial vasopressin infusion, or surgery, should be considered.

Conclusion:

Diverticulosis coli remains the most common cause of lower gastrointestinal bleeding .

This disease can present the most skilled clinician with a challenging diagnostic and therapeutic dilemma. Treatment protocols based on local resources and expertise should be developed to ensure the best possible outcomes for these difficult patients.

References:

1. Gennaro A R, Rosemond G P. Colonic diverticula and hemorrhage. *Dis Colon Rectum.* 1973;16(5):409–415.
2. Hoedema R E, Luchtefeld M A. The management of lower gastrointestinal hemorrhage. *Dis Colon Rectum.* 2005;48(11):2010–2024
3. Vernava A M, III, Moore B A, Longo W E, Johnson F E. Lower gastrointestinal bleeding. *Dis Colon Rectum.* 1997;40(7):846–858
4. Green B T, Rockey D C, Portwood G, et al. Urgent colonoscopy for evaluation and management of acute lower gastrointestinal hemorrhage: a randomized controlled trial. *Am J Gastroenterol.* 2005;100(11)
5. Chaudhry V, Hyser M J, Gracias V H, Gau F C. Colonoscopy: the initial test for acute lower gastrointestinal bleeding. *Am Surg*. 1998;64(8):723–728
6. Gennaro A R, Rosemond G P. Colonic diverticula and hemorrhage. *Dis Colon Rectum.* 1973;16(5):409–415.