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Case Report

Esophageal varices presenting as lower GI bleed in an infant: a rare presentation

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ABSTRACT

GI Bleeding is a common problem encountered in the emergency department and in the primary care settings. Lower GI Bleeding is relatively rare as compared to upper GI bleeding. Common causes of lower GI Bleeding are Polyp (32.5%), chronic nonspecific colitis (20.7%), lymphoid nodular hyperplasia (20%), Proctitis (18.2%), Solitary rectal ulcer (10%), Inflammatory bowel disease (6.5%).Among the various causes of lower GI Bleeding, esophageal varices is a rare cause. One such case presented to us with lower GI bleeding, on further evaluation was found to having esophageal varices due to portal hypertension. Child improved after conservative and definitive management.

Keywords: Esophageal varices, GI Bleeding, Lower GI bleeding, Octreotide, Portal hypertension, Upper bleeding

INTRODUCTION

GI bleeding in pediatrics is not a rare entity, any bleeding from GI tract whether upper or lower is an alarming sign. The gastrointestinal (GI) tract is a highly vascularized organ with a large surface area and any pathology involving the mucosa and the vasculature of the GI tract can lead to GI bleeding. GI bleeding is considered dangerous and should be approached meticulously.[1,2] Anatomically, it is categorized into upper and lower GI bleeding according to the site from which the bleeding originates. Upper GI bleeding originates above the ligament of Treitz, which is located at the duodenojejunal junction.[3] Lower GI bleeding originates from parts of the intestine distal to the ligament of Treitz.

The etiologies of lower GI bleed includes food allergy, infectious enterocolitis, Meckel's diverticulum, intussusception, lymphonodular hyperplasia, inflammatory bowel disease (IBD), angiodysplasia, fissure, polyps, colon bleeding disorders, malignancies, hemorrhoids, and hemolytic-uremic syndrome (HUS).[3-7]

CASE REPORT

A 15 months old female child, 1st born of non-consanguineous marriage came to us with prolonged fever that was low to moderate grade associated with fresh bleeding per rectum since 15 days. Lower GI bleeding was sometimes associated with stools and sometimes not associated with stool.

Associated history of abdominal distention was present with one episode of hematemesis. On clinical examination, child was having severe pallor with hepatomegaly and mild splenomegaly. She was a well grown child with normal development.

Birth history and feeding history was normal. There was no history of cow's milk feeding, chronic diarrhea, recurrent vomiting, jaundice, rashes, and signs of liver cell failure.

Detailed evaluation for lower GI bleeding was planned. CBC was suggestive of bicytopenia with normal WBC

count, normal liver and renal functions test. Specific investigations are mentioned below:

- USG abdomen- Enlarged caudate lobe of liver with coarse echo texture liver. Moderate ascites. Mild right side pleural effusion. Multiple collaterals seen at the porta hepatis, left gastric region and gastro esophageal junction with non-visualization portal vein.
- Upper GI endoscopy- Large Esophagus grade 3 varices, Gastro-Esophageal varices (GOV1F1), Severe portal hypertensive gastropathy (Figure 1).

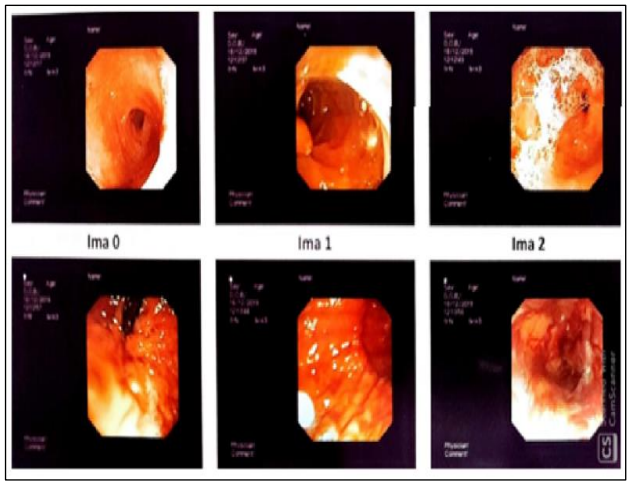

Figure 1: Upper GI endoscopy esophageal varices.

- CT abdomen- Relatively small left lobe and hypertrophy of the caudate lobe of the liver, Bilateral mild pleural effusion (R>L), gross ascites. Portal vein is not well opacified in the present scan. Multiple enhancing vessels/ varices, seen along lower esophagus, GE junction and cardis of the stomach (Figure 2).

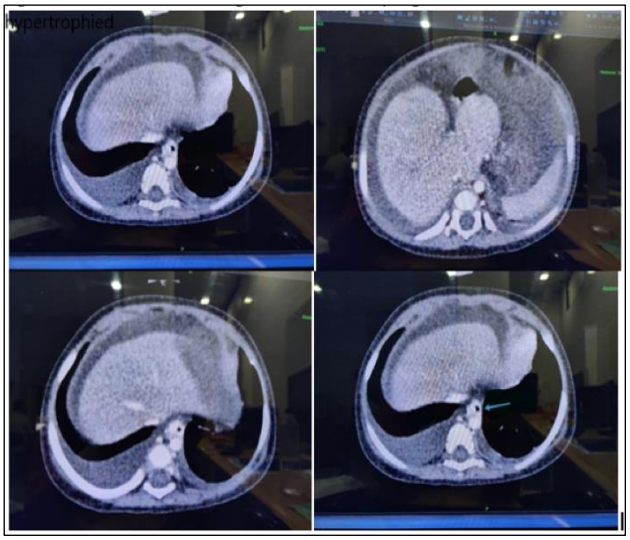

Figure 2: CT abdomen varices in the esophagus.

Simultaneously for haemodynamic stability of the patient, blood transfusion was given. IV antibiotics were given and as the facilities for pediatric sclerotherapy/ band ligation were not available at our centre, medical management for varices in form of octreotide was started. Within 72 hours, lower GI bleeding decreased. Patient was then referred to higher centre (hepatobiliary centre) where definitive treatment was given in the form of band ligation and shunt surgery. Further follow up is awaited.

Table 1: Etiologies of lower GI Bleeding as per age.

Infants	2-5 years	Older
Non specific colitis	**Polyps**	
Anal fissure	Anal fissure	Anal fissure
Milk allergy	Infectious enterocolitis	Infectious enterocolitis
Duplication of bowel	Intussusception	Polyps
Volvulus	Meckel's diverticulam	Inflammatory bowel disease
Hirschsprung's disease	Henoch-Schonlein purpura	Lymphonodular hyperplasia
Necrotizing enterocolitis	Hemolytic uremic syndrome	Henoch-Schonlein purpura
Bleeding diathesis	Lymphonodular hyperplasia	Angiodysplasia
		Hemolytic uremic syndrome
	Angiodysplasia	Bleeding diathesis

DISCUSSION

Rectal bleeding is an alarming symptom and requires additional investigations. All physicians should be adept at initiating resuscitation of a bleeding patient and ensuring that prompt diagnostic and therapeutic measures are undertaken. Common causes of lower GI Bleeding are Polyp (32.5%), chronic nonspecific colitis (20.7%), lymphoid nodular hyperplasia (20%), Proctitis (18.2%), Solitary rectal ulcer (10%), inflammatory bowel disease (6.5%).Common causes of lower GI bleeding as per age has been listed in Table 1.[7] While common causes are to be kept in mind during the workup of lower GI bleeding, rare causes cannot be excluded out. Esophageal varices is

a relatively rare cause of GI bleed in children below 13 years of age and it mostly presents as upper GI bleed. Presentation of Esophageal varices as lower GI bleeding in a 15 months old child is itself a very rare presentation.

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REFERENCES

1. Hulme B, Wilcox S. Guidelines on the management of bleeding for palliative care patients with cancer. Yorkshire Palliative Medi Clini Guidelines Group. 2008 Nov.
2. Palmer K. Acute upper gastrointestinal haemorrhage. British Medi Bull. 2007 Sep 1;83(1):307-24.
3. Rayhorn N, Thrall C, Silber G. A review of the causes of lower gastrointestinal tract bleeding in children. Gastroenterol Nurs. 2001 Mar 1;24(2):77-82.
4. Leung AK, Wong AL. Lower gastrointestinal bleeding in children. Pediatr Emerg Care. 2002 Aug 1;18(4):319-23.
5. Hillemeier C, Gryboski JD. Gastrointestinal bleeding in the pediatric patient. Yale J Biol Medi. 1984 Mar;57(2):135-47.
6. Fox VL. Gastrointestinal bleeding in infancy and childhood. Gastroenterol Clini North Am. 2000 Mar 1;29(1):37-66.
7. Noel, R. Upper and Lower Gastrointestinal Bleeding, 2020. Obgyn Key. Available at: https://obgynkey.com/upper-and-lower-gastrointestinal-bleeding/. Accessed 23 February 2020.

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