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SMALL BOWEL ANGIOECTASIA PRESENTING WITH RECURRENT BLEEDING: A CASE REPORT

Matthew Olumuyiwa Bojuwoye, Department of Medicine, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Orcid/0000-0002-6375-5203, Olushola Kayode Fasiku, Department of Surgery, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Orcid/0000-0001-9547-7191, Aminu Mansa Aliyu, Department of Medicine, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Orcid/0000-0002-4671-6501, Olaleke Oluwasegun Folaranmi, Department of Anatomic Pathology, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Orcid/0000-0002-0237-8934, Stephen Anya Onjefu, Department of Surgery, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Orcid/0000-0002-6800-6543, Ademola Adetoyese Adeyeye, Department of Surgery, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Orcid/0000-0003-1739-5013, Olalekan Ibukun Oyinloye, Department of Radiology, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Orcid/0000-0002-8161-0577, Abdulfatai Bamidele Olokoba, Department of Medicine, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Orcid/0000-0001-6955-4675

Corresponding author: Matthew Olumuyiwa Bojuwoye, Department of Medicine, University of Ilorin Teaching Hospital, Ilorin, P.M.B. 1459, Ilorin, Nigeria, Email, bojuwoyem26@yahoo.com
Orcid/0000-0002-6375-5203

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A CASE REPORT**

M. O. Bojuwoye, O. K. Fasiku, A. M. Aliyu, O. O. Folaranmi, S. A. Onjefu, A. A. Adeyeye, O. I. Oyinloye and A. B. Olokoba

SUMMARY

There are few published reports of small bowel bleeding from Nigeria. This may be attributed to several factors including; rarity, reduced index of suspicion and passing on before diagnosis in most health facilities in the country.

We present the case of a 37-year-old man with one-month history of haematochezia following the use of non-steroidal anti-inflammatory drugs for body pains. He had computed tomography angiography and video capsule endoscopy done after negative upper and lower gastrointestinal endoscopy. The video capsule endoscopy revealed angioectasia in the small bowel. The bleeding resolved following surgical resection of the small bowel segments affected by the angioectasia.

This report is an endeavor to highlight the importance of having a high index of suspicion in the management of small bowel bleeding.

INTRODUCTION

Small bowel bleeding (SBB) is seldom diagnosed when compared to bleeding from the upper gastrointestinal (GI) tract and the colon. It accounts for about 5%-10% of all cases of GI bleeding.^{1,2} Given the advances in small bowel imaging with video capsule endoscopy (VCE), deep enteroscopy, computed tomography enteroscopy (CTE), balloon enteroscopy and spiral enteroscopy, the source of bleeding in the small bowel can now be identified in most patients and appropriate treatment instituted.³ The diagnosis and management of SBB continues to pose a major challenge to clinicians in resource limited settings. This may be attributed to non-availability of the required diagnostic tools, encounter with few cases and reduced index of suspicion. It may also be due to limitations in identifying the source of bleeding which is either missed or overlooked during the index investigations.⁴ This often leads to recurrent or persistent bleeding that may require repeated hospitalizations, frequent investigations, and multiple blood transfusions.⁴ Angiodysplasia includes; angioectasia (AE), Dieulafoy's lesion (DL) and arteriovenous malformation (AVM). The AE is the most common cause of small bowel bleeding and is considered to be a venous lesion whereas DL and AVM are arterial lesions.⁵

This is the first report of recurrent bleeding from small bowel angioectasias in Ilorin, Nigeria

CASE HISTORY

A 37-year-old man referred to the medical emergency unit of our hospital with one month history of haematochezia. The blood was bright red with an average of two episodes per day, each estimated to be about 40-50mls. He had an episode of haematemesis of about 30mls with associated occasional dizziness but there were no fainting spells and no reduction in urine output. He had a preceding history of chronic ingestion of non-steroidal anti-inflammatory drugs (NSAIDs) for body pains. He had 5 units of blood transfused prior to presentation to our facility. He had no family history of GI malignancy.

On physical examination, he was pale, had no peripheral stigmata of chronic liver disease, pulse rate was 76 beats per minute, and the blood pressure was 110/70 mmHg. The abdominal examination was not remarkable. However, on digital rectal examination, the examining gloved finger was stained with bright red blood. He tested positive to the Hepatitis B surface antigen (HBsAg), whereas, the antibodies to hepatitis C virus (anti-HCV) and human immunodeficiency virus (HIV) screening tests were negative. An urgent upper GI endoscopy revealed non-erosive gastritis whereas colonoscopy revealed internal haemorrhoids, and fresh blood in the right colon but no obvious source of bleeding detected.

A Computed Tomography Angiography (CTA) of the abdomen showed a tortuous structure measuring approximately 3.5 cm, which enhanced brightly post-contrast hence suggestive of a vascular lesion in the region of the terminal ileum. (Figure 1).



Figure 1: Computed Tomography Angiography (CTA) image of the abdomen showing a vascular lesion (black arrow) in the region of the terminal ileum

Subsequently, he had VCE done which revealed the presence of angioectasia in the distal jejunum and terminal ileum. (Figure 2)



Figure 2: Video capsule endoscopy showing angioectasias (green circles) in the small bowel

The GI bleeding persisted, hence he underwent laparotomy and the intra operative findings were that of two suspicious segments of the small bowel. One was located in the terminal ileum about 44cm to the ileocaecal junction with linear punctate areas of bleeding and thickened adjacent mesentery. The other was located in the distal jejunum but appeared quiescent. In order to avoid short bowel syndrome, a limited right hemicolectomy was done with ileo-colic anastomosis. The histology of the excised segment of the terminal ileum was, however, essentially normal. Post operatively, the GI bleeding ceased, the patient's condition was stable, and he was eventually discharged home. He however re-presented two weeks after with recurrence of haematochezia necessitating re-

admission in the hospital. He had 4 units of blood transfused and also had a second-look colonoscopy which was unremarkable. This necessitated open surgical re-exploration of the abdomen and subsequent extended resection of the small bowel which included the suspicious segment of the distal jejunum. Post-surgery, the GI bleeding stopped; he was clinically stable and discharged home. He has been regular with the clinic follow up and there has not been any episode of re-bleed.

DISCUSSION

Small bowel bleeding from vascular lesions should be suspected whenever GI bleeding occurs in the setting of negative upper and lower GI endoscopy as demonstrated by this

case. Angioectasia which are pathologically dilated communications between veins and capillaries are examples of such lesions.⁶

Small bowel angioectasia are more common in persons aged 60 years or older and are the most common cause of small bowel bleeding in this age group.⁷ However, they can also be found in younger individuals like our index case who was 37 years old.

They may be subtle and focal,⁸ hence better identified on angiography than on histology of surgical specimens as was experienced in this case. There is a higher chance of identifying these vascular lesions in submitted surgical specimens when injected with silicone and then cleared with methyl salicylate.^{8,9} The resolution of the GI bleeding following the resection of these grossly abnormal segments of the small bowel further points to the angioectasias seen on VCE as the probable cause of the bleeding.

Treatment includes octreotide use, endoscopic therapies, argon plasma coagulation, mechanical clip placement, multipolar electrocoagulation, laser photo-ablation as well as radiological interventions like angiography with embolization.^{3,10} Surgery is usually employed when these modalities fail to stop the bleeding or when the required facilities and expertise are not available.¹⁰

CONCLUSION

This report highlights the management aspects of angioectasia so as to increase index of suspicion for early detection of Small Bowel Bleeding.

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