

Right-sided colonic adenocarcinoma presenting as recurrent hematochezia-a case report

Abstract

Colorectal cancer is a major cause of morbidity and mortality all over the world and it is the most common type of gastrointestinal cancer. It has varying modes of presentation. We present Mr O.D. a 75year old Nigerian of the Yoruba tribe who presented with recurrent hematochezia of three episodes in the last one year. There was associated history of progressive weight loss and recurrent constipation. He had a significant history of alcohol consumption. He was chronically ill-looking, pale, had grade 3 digital clubbing. Had a palpable mass located in the right hypochondriac region, can get above and below it, firm, mobile, non-tender, measured about 6cmx6cm in dimension. Full blood count: Packed Cell Volume-24%, White Blood Count-16.6X10⁹/L, Neutrophils-85%, Lymphocytes-13%, Monocytes-2%. Colonoscopic findings revealed the ascending colon contained circumferential fungating necrotic mass lesion extending all the way down to the caecum. The mass was friable, bled easily both spontaneously and with contact. Multiple biopsy samples were taken from the mass. There was some degree of luminal narrowing as well. The rest of the examined colon all appeared normal. Histology revealed well differentiated adenocarcinoma. The patient subsequently had an exploratory laparotomy done plus an extended right hemi-colectomy with ileo-colic anastomosis. Intra-operative findings revealed hepatic flexure tumour, hard, attached to the gall bladder and greater curvature of the stomach. The liver and peritoneal cavity were clean. Samples of Terminal Ileum, Ascending Colon & Proximal two-third of the Transverse Colon were sent for histology. Histology revealed moderately differentiated adenocarcinoma pT3 N0 Mx. He was discharged on 11th day post-op and had been seen at the clinic for follow-up. Colorectal carcinoma is becoming relatively more common in our environment than initially thought. Every case of hematochezia should be thoroughly evaluated. Early detection and prompt intervention remain the only ways the morbidity and mortality associated with this debilitating condition can be reduced since colorectal cancer is curable when detected early.

Keywords: colon, adenocarcinoma, hematochezia, tumour, histology

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Oguntoye Oluwatosin Oluwagbenga, Yusuf Musah, Omoseebi Oladipo

Department of Internal Medicine, Federal Teaching Hospital Ido-Ekiti and Afe Babalola University Ado-Ekiti, Nigeria

Correspondence: Oguntoye Oluwatosin Oluwagbenga, MBBS (Ibadan), FWACP (Gastroenterol), Lecturer I and Consultant Physician/Gastroenterologist and Hepatologist, Department of Internal Medicine Federal Teaching Hospital Ido-Ekiti and Afe Babalola University Ado-Ekiti Ekiti State, Nigeria, Tel 2.348086638538, Email proflast@yahoo.com

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Introduction

Colorectal cancer is a major cause of morbidity and mortality all over the world and it is the most common type of gastrointestinal cancer.¹ Colorectal cancer is the second most commonly diagnosed cancer worldwide in women, third in men.¹ Second leading cause of cancer deaths in the United States.² Nearly 530,000 deaths were recorded in 2002, that is, about 8% of all cancer deaths.² It is estimated that 394,000 deaths from colorectal cancer still occur worldwide annually.¹

The lifetime incidence for patients at average risk is 5 percent, with 90 percent of cases occurring after age 50.² It is a multifactorial disease process, with etiology encompassing genetic factors, environmental exposures (including diet), and inflammatory conditions of the digestive tract.¹ Surgery currently is the definitive treatment modality if the cancer is detected early. Colorectal cancer survival is highly dependent upon stage of disease at diagnosis. It ranges from a 90% 5-year survival rate for cancers detected at the localized stage; 70% for regional; to 10% for people diagnosed for distant metastatic cancer.¹⁻³ In general, the earlier the stage at diagnosis, the higher the chance of survival. Invasive colorectal cancer is a preventable disease which can be achieved through early cancer detection by widely applied screening programs such as colonoscopy for at risk individuals.⁴⁻⁷

Studies have shown that it accounts for 10-56% of all gastrointestinal malignancies in Nigeria.⁸⁻¹¹ Prognosis is generally poor and mortality is high partly due to the late presentation of our patients. They present

late partly because they are asymptomatic in the early stage of the disease and by the time they become symptomatic the disease is already far advanced. In addition, the symptoms such as hematochezia might have been attributed to something else without it being properly evaluated. Other symptoms include unexplained weight loss, fatigue, constipation and change in bowel habits among others. Individuals presenting with any of these symptoms should undergo a thorough medical evaluation as they may be the features of colon cancer.

Case presentation

We present Mr O.D. a 75 year old Nigerian of the Yoruba tribe who presented with recurrent hematochezia of three episodes in the last one year. He was in his usual state of health until a year ago when he had an episode of hematochezia. Blood was described as bright red, mixed with feces, exact quantity could not be ascertained. He had had two other episodes since onset, the second episode was about three months prior to presentation which presented essentially like the first episode, exact quantity could also not be ascertained. No associated dizziness, no fainting attacks, both episodes resolved spontaneously. Last episode was about four days prior to presentation, also described as bright red, mixed with feces, but of more quantity than the first two episodes, there was associated dizziness and blurring of vision but no fainting attack, no loss of consciousness.

There was associated history of weight loss which was noticed at about the same time as onset of bleeding as evidenced by loosening of previously tight fitted clothing. There was history of chronic

constipation which had been recurrent since onset of symptoms with associated passage of pellet-like stools, no alternating diarrhea. There was also history of passage of mucoid stool. No tenesmus and no history of anal protrusion. No history of bleeding from anybody orifices, no history suggestive of bleeding diathesis. No hematemesis, no epigastric pain, no abdominal swelling, no jaundice.

No family history of colorectal cancer. There was a significant history of alcohol consumption of about 90g per day in the last 50 years which patient stopped about five months ago following onset of symptoms but no history of cigarette smoking or use of tobacco in any form. He is not a known hypertensive or diabetic. Not a known peptic ulcer disease patient. No history of past hospital admissions, blood transfusion, or surgeries. He is married in a monogamous setting with seven children all alive and well. Review of system yielded no additional information.

Clinical examination revealed an elderly man, who was conscious, chronically ill-looking, pale, anicteric, acyanosed, not dehydrated, not febrile, had grade 3 digital clubbing, no significant peripheral lymph node enlargement, no pedal edema, no asterixis. The abdomen was full, moved with respiration, no area of tenderness, liver span was 8cm, the spleen and kidneys were not palpably enlarged. Had a palpable mass located in the right hypochondriac region, can get above and below it, firm, mobile, non-tender, measured about 6cmx6cm in dimension. No ascites. Bowel sound was normoactive. Digital rectal examination revealed a fair perineal hygiene, normal sphincteric tone, rectal mucosa was smooth and freely mobile, no mass felt, rectum was filled with well-formed feces. Prostate was mildly enlarged. Examining finger was stained with brownish feces, no melena, no hematochezia. The examination of the other systems was essentially normal. A provisional diagnosis of suspected Hepatic flexural mitotic lesion was made to rule out Diverticular Disease. Full blood count: Packed Cell Volume-24%, White Blood Count-16.6X10⁹/L, Neutrophils-85%, Lymphocytes-13%, Monocytes-2%. Peripheral blood film appearance- Poikilocytosis, Hypochromasia, Nucleated RBCs, Toxic granulated neutrophils noted with platelet aggregation.

Colonoscopy. The colonoscope was passed all the way down to the ascending colon (distal part). The ascending colon contained circumferential fungating necrotic mass lesion extending all the way down to the caecum. The mass was friable, bled easily both spontaneously and with contact. Multiple biopsy samples were taken from the mass. There was some degree of luminal narrowing as well. The rest of the examined colon all appeared normal. No diverticulum or polyp seen. No observable synchronous tumour seen. Endoscopic Diagnosis was Right-sided colonic adenocarcinoma.

Histology

- Macroscopy:** Specimen consists of 4 tiny pieces of greyish-white tissue, altogether measuring 0.5cmx0.5cmx0.1cm.
- Microscopy:** Histologic sections show fragments of rectal tissue with effaced architecture composed of irregular malignant glandular structures invading the smooth muscles wall. The lining malignant epithelial cells are large with markedly pleomorphic, hyperchromatic, vesicular and occasional bizarre nuclei with prominent nucleoli. There are few abnormal mitotic figures. Also seen are areas of hemorrhage and necrosis with attendant mixed inflammatory cellular infiltrates.
- Diagnosis:** Right-sided colonic biopsy- Well differentiated adenocarcinoma The patient subsequently had an exploratory

laparotomy done plus an extended right hemicolectomy with ileo-colic anastomosis. Intra-operative findings revealed hepatic flexure tumour, hard, attached to the gall bladder and greater curvature of the stomach. The liver and peritoneal cavity were clean. Samples of Terminal Ileum, Ascending Colon & Proximal two-third of the Transverse Colon were sent for histology.

Histology

- Macroscopy:** Received a resected segment of the bowel comprising of the ileum, caecum, ascending colon and proximal 2/3rd of the transverse colon. It weighs 750g. The bowel loops are extensively matted together and covered by adhesive bands. It measures 50cm in length. Cut-sections of the bowel show a huge circumferential cauliflower-like friable colonic mass obstructing the lumen. The mass measures 10x4cm. The proximal and distal resection margins measure 10cm and 15cm respectively from the mass. The mucosa surface distal to the mass is extensively sloughed off. The bowel is accompanied by 3 pieces of fatty tissue.
- Microscopy:** Sections from colonic mass show a malignant epithelial neoplasm invading the colon as far as serosa. The malignant cells are in form of glandular structures, sheets and nests. The cells are large with hyperchromatic and vesicular nuclei with prominent nucleoli. There are abnormal mitoses. A focus showing malignant glands floating in pool of mucin is seen. A dense mixed inflammatory cellular infiltration of neutrophils, lymphocytes and plasma cells is also present. Sections from the resection margins and lymph node are free of tumour cell.
- Diagnosis:** Colon-Moderately differentiated adenocarcinoma pT3 N0 Mx. The patient was discharged on 11th day post-op and had been seen at the clinic for follow-up (Figures 1-6).

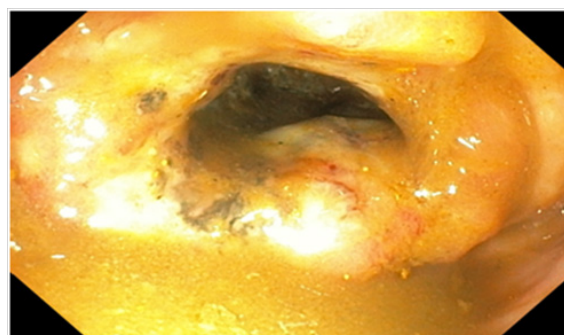


Figure 1 An Endoscopic image of the Hepatic flexure showing the tumour mass.

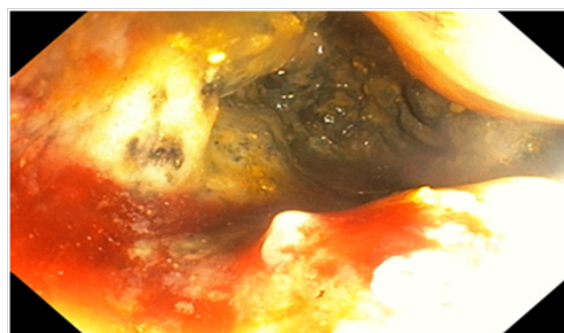


Figure 2 An Endoscopic image of the Ascending colon showing the tumour extending all the way to the cecum.



Figure 3 An endoscopic image of the Transverse colon showing normal appearance.

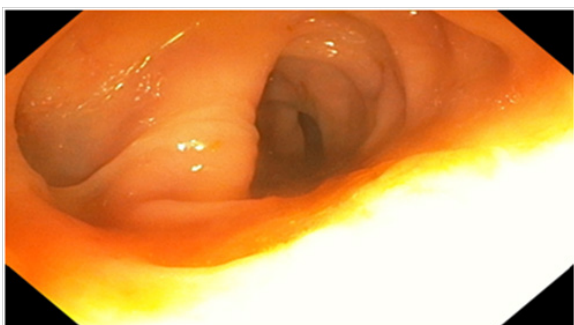


Figure 4 An endoscopic image of the Descending colon showing normal appearance.



Figure 5 An endoscopic image of the Sigmoid colon showing normal appearance.

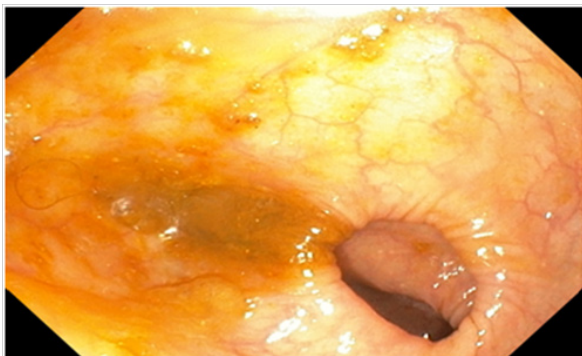


Figure 6 An endoscopic image of the Recto-sigmoid junction showing normal appearance.

Conclusion

Colorectal carcinoma is becoming relatively more common in our environment than initially thought and hematochezia is one of its manifestations. Individuals presenting with hematochezia, either in

isolation or alongside the other known presenting features of colorectal cancer, should undergo a thorough medical evaluation for colorectal cancer. Early detection and prompt intervention remain the only ways the morbidity and mortality associated with this debilitating condition can be reduced since colorectal cancer is curable when detected early. Colorectal carcinoma is also a preventable condition which can be achieved by avoidance of the risk factors associated with it and early removal of pre-malignant lesions identified during routine screening colonoscopy. There is a need to have a national guideline in Nigeria for colorectal cancer screening in order to aid early cancer detection. As physicians, we do have great roles to play both in implementing the screening modalities for colorectal cancer and in health educating the general populace about the importance of this screening so as to nip this scourge in the bud.

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Conflicts of interest

Authors declare that there is no conflict of interest.

References

1. Ferlay J, Shin HR, Bray F, et al. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. *Int J Cancer*. 2010;127(12):2893–2917.
2. Smith RA, Cokkinides V, Brooks D, et al. Cancer screening in the United States, 2010: a review of current American Cancer Society guidelines and issues in cancer screening. *CA Cancer J Clin*. 2010;60(2):99–119.
3. Okamoto M, Shiratori Y, Yamaji Y, et al. Relationship between age and site of colorectal cancer based on colonoscopy findings. *Gastrointest Endosc*. 2002;55(4):548–551.
4. Rex DK, Johnson DA, Anderson JC, et al. American College of Gastroenterology Guidelines for colorectal cancer screening 2008. *Am J Gastroenterol*. 2009;104(3):739–750.
5. Raquel ED, Elizabeth R, Todd HB, et al. American Society for Gastrointestinal Endoscopy: colorectal cancer screening and surveillance 2006. *Gastrointestinal Endoscopy*. 2006;63(4):546–557.
6. Levin B, Lieberman DA, McFarland B, et al. Screening and Surveillance for the Early Detection of Colorectal Cancer and Adenomatous Polyps, 2008: A Joint Guideline From the American Cancer Society, the US Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology. *CA Cancer J Clin*. 2008;58(3):130–160.
7. Leddin D, Hunt R, Champion M, et al. Canadian Association of Gastroenterology and the Canadian Digestive Health Foundation: Guidelines on colon cancer screening. *Can J Gastroenterol*. 2004;18(2):93–99.
8. Elesha SO, Owonikoko TK. Colorectal neoplasms: a retrospective study. *East Afr Med J*. 1988;75(12):718–723.
9. Ohanaka CE, Ofoegbu RO. The pattern of surgical cancers in Nigeria: the Benin experience. *Trop Doct*. 2002;32(1):38–39.
10. Obafunwa JO. Pattern of alimentary tract tumours in Plateau state: a middle belt area of Nigeria. *J Trop Med & Hyg*. 1990;93:351–354.
11. Abdulkareem FB, Abudu EK, Awolola NA, et al. Colorectal carcinoma in Lagos and Sagamu, Southwest Nigeria: a histopathological review. *World J Gastroenterol*. 2008;14(42):6531–6535.