American Journal of
Biomedical Science & Research

www.biomedgrid.com
ISSN: 2642-1747

Case Report

Chronic Haemorrhoidal Bleeding as Initial Presentation of Chronic Myeloid Leukaemia: A Case Report

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To Cite This Article: *Kelechi Chikezie*, Obineche Agwu, Victoria N Uwanuruochi, Ifeyinwa O Chukwukwe, Godspower C Onyegaolu, et al. Adekunle OluwatoyinM, Oladipupo DotunO, et al. Chronic Haemorrhoidal Bleeding as Initial Presentation of Chronic Myeloid Leukaemia: A Case Report. Am J Biomed Sci & Res. 2025 28(2) AJBSR.MS.ID.003665,* **DOI:** 10.34297/AJBSR.2025.28.003665

Received: August 18, 2025; **Published:** August 25, 2025

Abstract

We report a case of a 21-year-old with over two years of rectal bleeding attributed to haemorrhoids, who was diagnosed with Chronic Myeloid Leukaemia (CML). An incidental finding of marked leukocytosis (WBC 187.45 X 10^9/L), anaemia (Hb 7.4g/dl), and normal platelet count (306 X 10^9/L) prompted haematology referral. The only presenting symptom suggestive of CML was the chronic rectal bleeding attributed to haemorrhoids. CML is a Clonal Myeloproliferative neoplasm characterized by uncontrolled proliferation of myeloid cells at different stages of maturation. Patients are predisposed to gastrointestinal bleeding due to thrombocytopenia, platelet dysfunction, coagulopathy or vascular lesions. This case underscores the importance of considering a haematologic malignancy in patients with chronic unusual bleeds, even in the presence of a local plausible cause.

Introduction

Chronic Myeloid Leukaemai (CML) is a myeloproliferative neoplasm typically characterized by uncontrolled proliferation of cells of the myeloid lineage [1]. The definition of CML takes into cognizance the characteristic chromosomal translocation t (9;22) (q34.1; q11.2) [2]. The disease typically evolves through three phases-Chronic, accelerated and blastic phases with varying symptomatology. Many cases are diagnosed incidentally during routine blood counts [2]. Common symptoms include fever, weight loss, night sweats, splenomegaly and early satiety. In advanced phases, features such as anaemia, petechiae, purpurae, ecchymoses and mucosal bleeding may occur [2]. While gum and nasal bleeding are more typical, lower gastrointestinal bleeding is rare and haemorrhoids are not directly linked to CML [3]. Patients with bleeding haemorrhoids often receive surgical or conservative management without extensive systemic evaluation. However, rare cases have been reported where uncontrolled haemorrhoidal bleeding was the first sign of CML [3]. We present such a case and highlight the diagnostic challenge posed by coexisting common anorectal conditions.

Case Report

A 21-year-old male who was referred from a private facility to the General Surgery Outpatient with a history of rectal bleeding for

over two years. Examination revealed bleeding third degree haemorrhoids and conservative management was commenced while awaiting haemorrhoidectomy. Preoperative investigations revealed WBC count of 187.45×10^9/L, platelet count of 306×10^9/L, and Hb of 7.4g/dl, prompting haematology referral. Examination showed an afebrile, moderately pale, anicteric young man with left axillary and bilateral inguinal lymphadenopathy (approximately 2cm ×2cm, rubbery, non-tender). Abdominal examination revealed hepatomegaly (8cm below the right costal margin) and splenomegaly (12cm below the left costal margin). Peripheral Blood Film (PBF) demonstrated a leukoerythroblastic picture, marked hypochromia, anisopoikilocytosis, nucleated red cells, leukocytosis and granulocytic series cells at all maturation stages. A diagnosis of Chronic phase CML versus Leukemoid reaction was made, and BCR-ABL testing was requested.

The patient commenced hydroxyurea (1g 12-hourly), Allopurinol, haematinics and other supportive medications. Three weeks later, his WBC decreased to 16.28 ×10^9/L, Hb dropped to 3.6g/dl, and platelets to 190×10^9/L. BCR- ABL assay detected transcript type e14a2, with 1660 copies/5μL and ratio of 11.14% confirming CML. Hydroxyurea was discontinued and imatinib (200mg daily) was initiated after transfusion of blood products. Haemorrhoidectomy was deferred to haematologic stabilization. However, patient defaulted follow-up due to academic commitments. Three weeks later, he re-presented with rectal and gum bleeding. FBC showed WBC 35.81×10^9/L, severe neutropenia (ANC of 0.24 ×10^9/L), Hb 5.4g/dl, and platelet 24 × 10^9/L. PBF revealed pancytopenia with large lymphocytes but no blasts. Imatinib was stopped and Filgrastim, blood products, antimicrobials, haematinics and tranexamic acid were administered. Despite supportive therapy, his ANC dropped to 0.03 ×10^9/L, Hb 5.0g/dl, and platelets 1×10^9/L, and he developed acute respiratory distress the next day. Resuscitation was unsuccessful, and he was pronounced dead. Coagulation profile was not done before his demise.

Discussion

Haemorrhoids are common, with a prevalence of 22.7% in Sokoto, Nigeria, most frequently affecting individuals aged between 18 and 29 years. [4] While this age range matched our patient's profile, CML is rare in young adults [5], though incidence in this group is rising in low-resource settings [6]. CML-related bleeding can result from thrombocytopenia, thrombocytopathy and coagulopathy. [2] Rectal bleeding is rarely the initial manifestation. In our patient, haemorrhoids masked the underlying haematologic disorder, delaying diagnosis for over two years. Unusual bleeding sites in CML include intracranial haemorrhage [7,8] spontaneous hemoperitoneum [9], and Disseminated Intravascular Coagulopathy (DIC) [10]. Factor VIII functional defect has also been described, and bleeding can occur despite normal coagulation profiles [11].

This case reinforces the need for full blood count evaluation in patients with chronic or unexplained bleeding, even when a common local cause is identified. Early detection of CML allows timely initiation of targeted therapy, potentially improving outcomes.

Conclusion

Chronic haemorrhoidal bleeding may rarely be the first sign of CML. Clinicians should maintain a high index of suspicion for haematologic malignancy in patients with persistent or disproportionate bleeding, especially when accompanied by splenomegaly or abnormal blood counts.

Acknowledgments

None.

Conflicts Of Interest

None.

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