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Case Report

Rectal Bleeding Revealing Acute Myeloid Leukemia (AML): About a Case in the Hepato- Gastroenterolgy Department of National Hospital of Niamey

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Abstract

The hemorrhagic syndrome in its clinical, cutaneous and ocular diversity most often constitutes the circumstances in which acute leukemia is discovered. Digestive mucosal involvement is rarely indicative of serious bone marrow failure, thus posing a problem of etiological diagnosis in a gastroenterological medical setting [1]. In the literature, it varies from 2 to 10-15% depending on the study and is considered a sign of poor prognosis requiring early diagnosis for better management [2]. We report a case of a 59-year-old woman admitted for rectal bleeding associated with an anemic syndrome. The initial clinical examination showed a finger cot stained with bright red blood. The blood count had shown anemia at 6.4g/dl microcytic, normochromic, neutropenia at $1.8x10^3$, thrombocytopenia at 36.10^3. Colonoscopy and esogastroduodenoscopy were normal. Blood smear and myelogram were in favor of Acute Myeloid Leukemia. Karyotype and immunophenotyping were not performed. Symptomatic treatment was offered. The evolution is marked by the improvement of the clinical signs. This association, acute myeloid leukemia and rectal bleeding is rarely described in the literature.

Keywords: hematochezia, acute myeloid leukemia, bone marrow failure, HNN, Niamey.

INTRODUCTION

Acute leukemias are malignant hemopathies, characterized by a clonal monoclonal proliferation of immature hematopoietic stem cells called "blasts" with a maturation block. It can be Myeloid, called Acute Myeloblastic Leukemia (AML) or lymphoid called Acute Lymphoid Leukemia (ALL). In both cases, medullary invasion by blasts results in medullary insufficiency often at the forefront of the diagnosis. Hemorrhagic syndrome, in particular rectal bleeding, is rare but also constitutes a sign of seriousness. According to several data, its frequency of occurrence varies from 2 to 10- 15% [1, 2]. We report the case of a 59-year-old woman, presenting with rectal bleeding with a normal colonoscopy and esogastroduodenoscopy, in whom the diagnosis of AML was made on the basis of the Complete Blood Count, blood smear and myelogram.

PATIENT AND OBSERVATION

A 59-year-old patient, known to be hypertensive under well-conducted and balanced treatment, was admitted to the hepato-gastroenterology department for intermittent rectal bleeding. No drug intake or exposure to toxins was found. On examination, she presented with WHO stage 3 Alteration of General Condition (AEG), an anemic syndrome (heart rate at 130 beats/minute, FR at 36 cycles/minute, discolored conjunctivae and mucous membranes). No splenomegaly or lymphadenopathy. On digital rectal examination, the finger cot brought back bright red blood. In front of the hemorrhagic picture, a colonoscopy and an esogastroduodenoscopy

were performed and came back normal. A complete blood count (NFS) was performed showing: leucopenia at 3200/mm3 (PNN = 723/ul, lymphocytes =4090/ul, monocytes = 280/ul), thrombocytopenia at 7000/mm3 and anemia (Hb= 6.4 g/dl, microchrocytic (MCV=76 fl), normocytic (MCHC=35%), aregenarative (reticulocytes= 104000/ul) Blood smear stained with May-Grünwald-Giemsa (MGG) showed the presence of 52 % of circulating blasts LDH levels were at 2014 IU/L and uric acid at 136 mg/L Inflammatory assessment showed CRP at 8 mg/L A myelogram was performed, showing marrow richness moderate to poor invaded by 58% of small-sized myeloid-like blasts, with a regular nucleus, relatively unbound and nucleolated chromatin and little extensive basophilic cytoplasm (Figure 1).karyotyping and immunophenotyping were not performed. In view of these clinical data and the results of the blood smear and the myelogram, the diagnosis of acute myeloid leukemia was retained.

The extension assessment whose chest X-ray did not show enlargement of the mediastinum or signs of leucostasis. Abdominal ultrasound showed a subcapsular splenic hematoma, lumbar puncture was not performed due to deep thrombocytopenia (platelets at 7000/mm3).

Upon hospitalization, the patient was put on: alkaline hyperhydration, allopurinol, bi-antibiotic therapy (ceftriaxone and aminoglycosides) and repeated transfusions with red blood cells and apheresis platelet concentrates in view of the persistence of the haemorrhagic syndrome. As the clinical signs improved, the patient was discharged from the hospital.

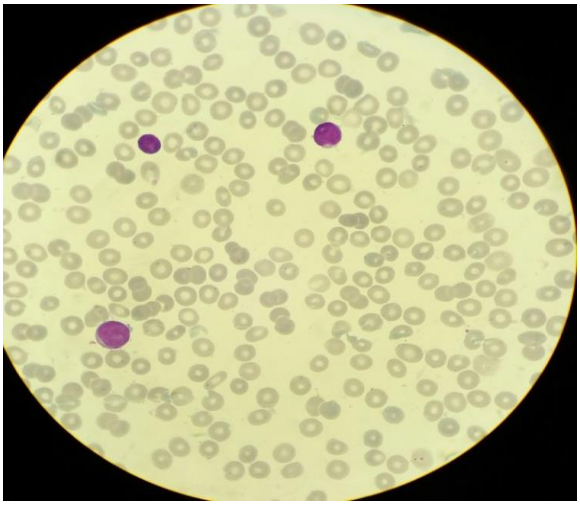

Figure 1: Myeloblast in myelogram

DISCUSSION

Leukemia is the second type of hematological cancer [3]. There are several entities; among these, acute myeloid leukemias represent 80% of leukemias in adulthood [4, 5]. Hemorrhagic syndrome is a progressive entity of acute myeloid leukemia but also has a poor prognosis. This pathology is still obscure, in Niger no study has been conducted on rectal bleeding and LAM. This was the case of our 59-year-old adult patient in whom the diagnosis was made in the face of persistent rectal bleeding. According to the literature, the etiologies of AML are still unknown, apart from the predisposing factors [6]. At the limit of the examinations carried out, no predisposing factor was highlighted in our patient. Advanced age greater than 35 years, macrosomia with a birth weight greater than 4000 g, maternal cannabis use during pregnancy, maternal exposure to type II topoisomerase inhibitors during pregnancy, heavy maternal smoking before birth have been mentioned in the literature as a predisposing factor [7]. In our observation, the mode of clinical revelation of the disease was rectal bleeding. Huguin *et al.*, reported as the main manifestation a tumor syndrome consisting mainly of hepatomegaly or splenomegaly in 95.45% of cases, lymphadenopathy in 31.82% of cases [8].

Cutaneous signs, such as leukemia, were found in 40.41% of cases, hypotonia was demonstrated in 18.18% of children. It was associated with central nervous system involvement in 14% of cases. A hemorrhagic syndrome was present in nearly 63.64% of cases [9, 10]. Bleeding events are rare in acute myeloid leukemia, when they occur, they represent a serious phenomenon that darkens the prognosis and especially when these hemorrhages affect the mucosa. As a result, the prognosis is fatal despite the improvement in the clinical condition of our patient. Our case is the first observed in the hepatogastroenterology department. It is therefore very important to think about it in time in the face of digestive bleeding with normal endoscopic examinations and disturbances of the blood lines on the complete blood count.

CONCLUSION

The etiologies of rectorrhagia are most often digestive, in acute leukemia, they are rare and reflect a serious bone marrow failure which announces a poor prognosis. Note that it is important to very often think of bone marrow failure in the face of gastrointestinal bleeding with normal endoscopies.

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