Article

PAMJ Clinical Medicine

Images in clinical medicine

Burkitt´s lymphoma: clinical image of a rare but nasty cancer

Rachid Douge

Corresponding author: Rachid Douge, Department of Medical Biology, Mohamed VI University Hospital Center-Tanger, Tanger, Morocco. rachid.douge@gmail.com

Received: 03 Dec 2024 - **Accepted:** 04 Jan 2025 - **Published:** 27 Jan 2025

Keywords: Burkitt's lymphoma, blood count, blood smear, immunophenotyping

Cite this article: Rachid Douge et al. Burkitt´s lymphoma: clinical image of a rare but nasty cancer. PAMJ Clinical Medicine. 2025;17(9). 10.11604/pamj-cm.2025.17.9.46116

Available online at: https://www.clinical-medicine.panafrican-med-journal.com//content/article/17/9/full

Burkitt's lymphoma: clinical image of a rare but nasty cancer

Rachid Douge[1,2,&]

[1]Abdelmalek Essaâdi University, Faculty of Medicine and Pharmacy, Tangier, Morocco, [2]Department of Medical Biology, Mohamed VI University Hospital Center-Tanger, Tanger, Morocco

[&]Corresponding author

Rachid Douge, Department of Medical Biology, Mohamed VI University Hospital Center-Tanger, Tanger, Morocco

Image in medicine

Burkitt's lymphoma is a rare, aggressive cancer of the B-type lymphoid cells, one of the malignant non-Hodgkin's lymphomas. It mainly affects children and young adults, and is characterized by the rapid growth of cancer cells, usually in the lymph nodes, but it can also spread to other organs. We report the case of a 53-year-old male, chronic smoker, with no particular personal or family pathological history. For the past six months, he had presented with increasing asthenia associated with unquantified weight loss and progressive deterioration in general condition. Clinical examination revealed a hypertensive patient (16/10) with a fever of 38.6°C and respiratory dyspnea. Automated blood count

showing a thrombocytopenia (22 x 10^3/mm^3) with hyperleukocytosis (30.3 x 10^3/mm^3), hyperlymphocytosis (6.4 x 10^3/mm^3) and hypermonocytosis (20 x 10^3/mm^3), while hemoglobin was normal (12.6g/dl). Microscopic examination of May-Grünwald Giemsa (MGG) stained blood smear revealed the presence of a blast cell population evoking Burkitt cells. Manually corrected differential leukocyte count was as follows: blast cells (55%), neutrophil polynuclear cells (11%), lymphocytes (30%), monocytes (4%). The rest of laboratory work-up showed D-dimer levels at 1500 ng/ml, fibrinogen at 0.92g/l, Lactate Dehydrogenase (LDH) at 745 U/l and C-reactive protein (CRP) at 120mg/l. Immunophenotyping reported CD10+, CD19+, CD20+, CD22+ and CD5-, CD23-, CD30-. The cytogenetic study was not performed due to the lack of resources. The patient died within a few hours of being admitted to the emergency department. Although Burkitt's lymphoma is an aggressive cancer, it can be effectively treated with chemotherapy if diagnosed early. However, if the diagnosis or treatment is delayed, the outcome is often fatal.

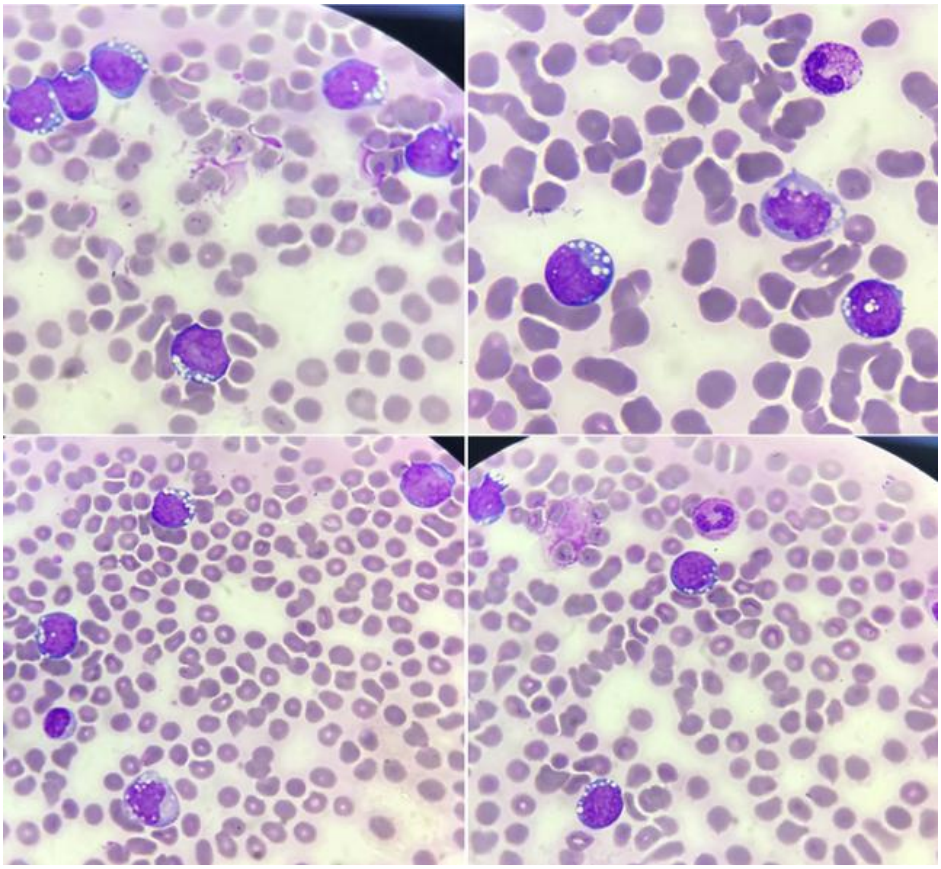

Figure 1: medium-sized cells with sometimes irregular outlines, basophilic cytoplasm containing vacuoles and large nuclei (high nucleo-cytoplasmic ratio) with loose chromatin most often nucleolated, evoking the appearance of Burkitt cells