

Caution Regarding the Difference Between Flower-Like Lymphocytes and Flower-Like Plasma Cells

Çiçek Gibi Lenfositler ile Çiçek Gibi Plazma Hücreleri Arasındaki Farka Dikkat!

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To the Editor,

We attentively read the paper by Sall et al. [1] recently published in Turkish Journal of Hematology. These authors reported a case of multiple myeloma showing abnormal plasma cells with flower-shaped nuclear features. These cells with flower-shaped nuclei have also been reported in cases of plasma cell leukemia in previous studies [2,3,4,5]. The authors described the morphological features of flower-like cells in order to help pathologists identify them for diagnostic purposes. However, the flower-like plasma cells with condensed chromatin presented in Figure 1B of the original study [1] look like flower-like lymphocytes. Furthermore, these cells had not been confirmed by immunocytochemical staining. CD20 or CD138 immunocytochemistry could have been used to confirm whether these cells were flower-like plasma cells or

flower-like lymphocytes, as previously reported [6]. Therefore, the differential diagnosis between flower-like lymphocytes and flower-like plasma cells should be approached with caution.

As we know, the presence of flower-like lymphocytes is a well-known morphological feature in the peripheral blood of patients with adult T-cell leukemia/lymphoma (ATLL) [7]. However, evaluation of flower-like lymphocytes must be performed carefully because these cells appear not only in ATLL patients but also in patients with various other diseases entailing reactive or neoplastic lesions, or even in healthy individuals [6,8].

In our experience, these flower-like lymphocytes are frequently found in the peripheral blood in routine daily blood examination. We can consider the daily peripheral blood of a hepatitis B and an anemia patient for example. Flower-like lymphocytes are clearly visible in the peripheral blood (Figures 1A and 1B).

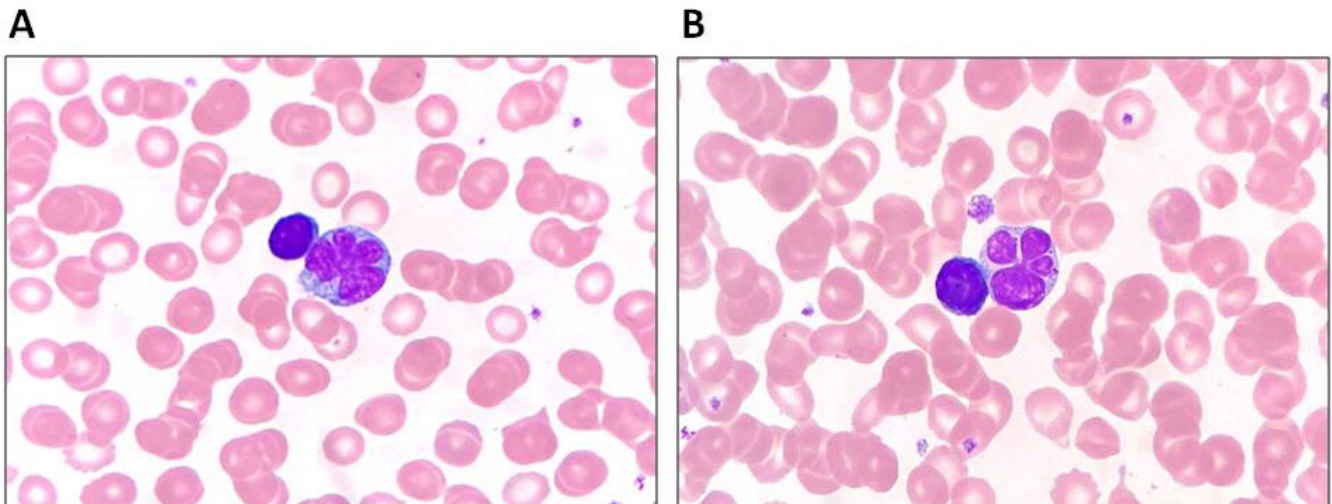


Figure 1. Peripheral blood smears of a hepatitis B patient (A) and an anemia patient (B) reveal flower-like lymphocytes. These flower-like lymphocytes clearly have flower-like nuclei (Wright-Giemsa staining, 1000 \times).

Therefore, when encountering these flower-like cells in blood smears, flower-like lymphocytes should also be considered for the differential diagnosis of flower-like plasma cells.

Keywords: Flower-like lymphocyte, Flower-like plasma cell, Difference

Anahtar Sözcükler: Çiçek benzeri lenfosit, Çiçek benzeri plazma hücresi, Fark

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Ethics

Authorship Contributions

Surgical and Medical Practices: J.Z., Concept: J.L.; Design: Y.W.; Data Collection or Processing: J.Z.; Analysis or Interpretation: J.Z.; Literature Search: Z.L.; Writing: J.L.

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To the Editor,

We thank Zhu et al. for their interest in our article.

We agree with their observations regarding lymphocytes. However, in our patient, these flower-like plasma cells were found only in the marrow. Cytochemistry was not performed, but all relevant cytological evidence was visible on the smear: for example, rouleaux, plasma cells, and nuclear budding. Upon immunophenotyping, a homogeneous population of tumor plasma cells was found. HBV and HTLV1 serologies were also evaluated and were negative.

In the absence of clinical signs such as bone pain and spontaneous fractures and in light of the monoclonal gamma-globulin peak, cytologic immunophenotypic evidence, and serological negativity, we agree that flower-like lymphocytes could be considered in the differential diagnosis.

Sincerely,

Abibatou Sall, Moussa Seck, Diama Samb, Blaise Faye, Macoura Gadji, Saliou Diop, Awa Oumar Touré

