

Epithelial Cells in a Peripheral Blood Smear

Periferik Yaymada Epitel Hücreleri

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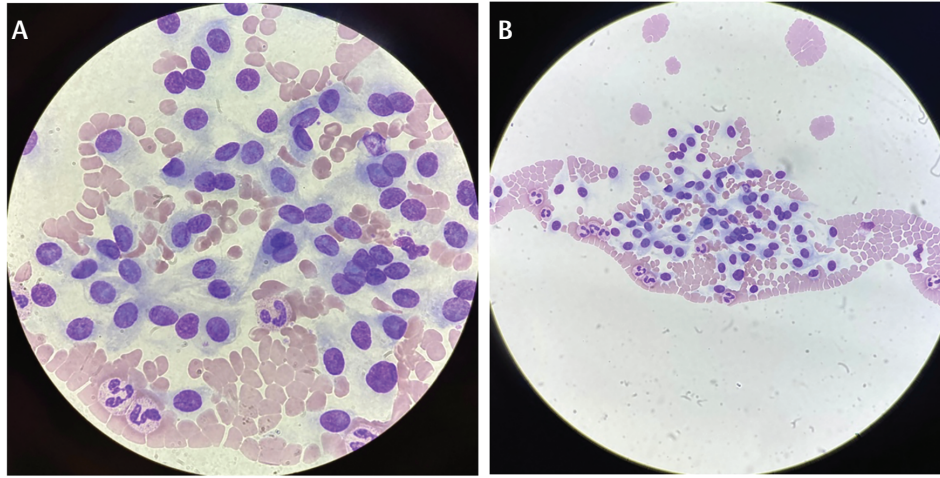


Figure 1. A) Microscopic findings in Wright-stained cells under 100^x magnification. B) Microscopic findings in Wright-stained cells under 40^x magnification.

A 56-year-old man with a history of asthma, chronic hepatitis C infection, and previous heroin abuse presented to the emergency department with complaints of epigastric pain and vomiting. He was diagnosed with gastritis. During the examination, the complete blood count showed hemoglobin of 13.5 g/dL, leukocyte count of 9.70x10⁹/L, and platelet count of 118x10⁹/L. A Wright-stained peripheral blood smear showed normochromic normocytic red cells with occasional myelocytes and reactive lymphocytes. A few clusters of medium-to-large cells containing elongated oval-grooved nuclei with pale blue frayed cytoplasm at both ends were found at the tail-end of the blood smear, and the nuclei were larger than those of the lymphocytes and had finely stippled or granular appearance (Figures 1A and 1B). These cells were likely epithelial cells and were reported as non-hematopoietic cells. A subsequent preparation from a fresh EDTA tube did not show additional epithelial cells. The presence

of these abnormal cells may have been due to improper mixing prior to aspiration with the Sysmex automated slide maker SP-10, which caused the analyzer to aspirate the buffy coat layer [1]. It may also have occurred due to a blunted needle tip being used or from repeated unsuccessful venipuncture attempts [2,3]. These abnormal cells can also be rarely seen from finger or heel pricks [4] due to transference of skin into the blood tube.

Keywords: Red blood cells, Lymphocytes, Neutrophils

Anahtar Sözcükler: Kırmızı kan hücreleri, Lenfositler, Nötrofiller

Ethics

Informed Consent: This study did not involve personal information; only laboratory data were reported. Patient consent was therefore waived.



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