

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

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### Hematology-Cell Morphology – Case 20

Monoblasts, promonocytes and monocytes

Monoblasts <80% of non-erythroid bone marrow cells and the remaining cells are mainly promonocytes and monocytes

Monocytic percentage of blood higher than bone marrow

Predominance of promonocytes in the bone marrow

Large cerebriform nucleus

Well visible nucleoli

Light basophilic cytoplasm

Azurophilic granules.

Blasts with a large folded nucleus, fine chromatin network, multiple nucleoli and abundant cytoplasm with pseudopodia formation. In the bone marrow there may be a predominance of the promonocytes, while in the peripheral blood there are mature, as well as immature cells of the monocytic series in different proportions. In comparison with the monoblasts, the promonocytes have a larger, irregular or folded nucleus, while the cytoplasm contains small azurophilic granulation and color, varying from light acidophilic to a blue/ashy coloration (figures 1 to 16).

Non-specific esterase (ANAE) staining: Heavy positivity, sensible to sodium fluoride (NaF) inhibition. Peroxidase, specific esterase (NACE), acid phosphatase and periodic acid-Schiff (PAS) staining: Weakly positive or negative.

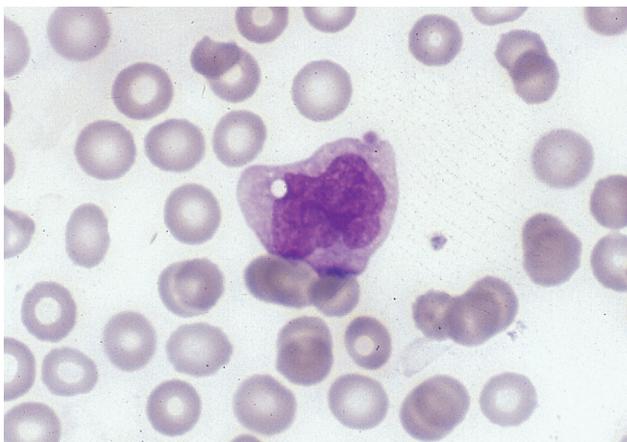


Figure 1

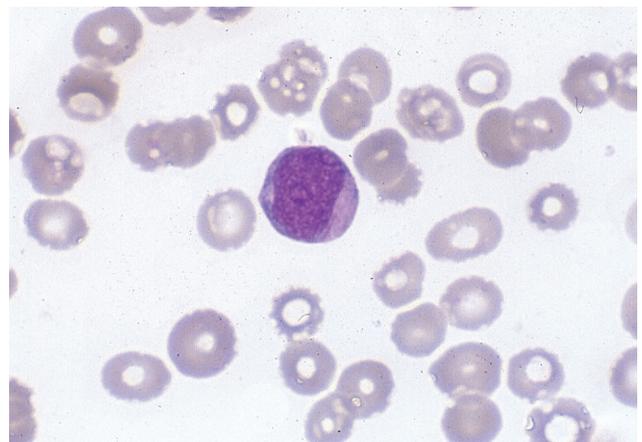


Figure 2

ARCHIVES OF HELLENIC MEDICINE 2023, 40(2):284–286  
ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2023, 40(2):284–286

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#### References

1. MELETIS J. *Atlas of hematology*. 3rd ed. Nireas Publ Inc, Athens, 2009:386–390

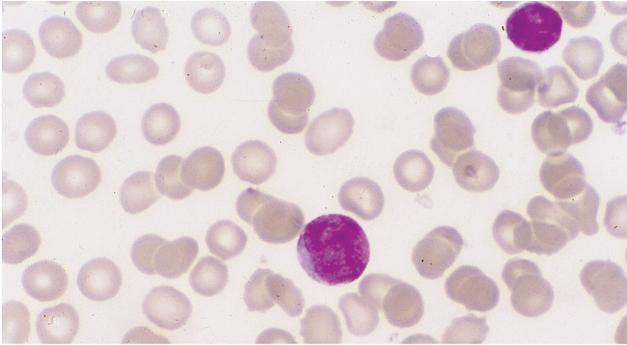


Figure 3

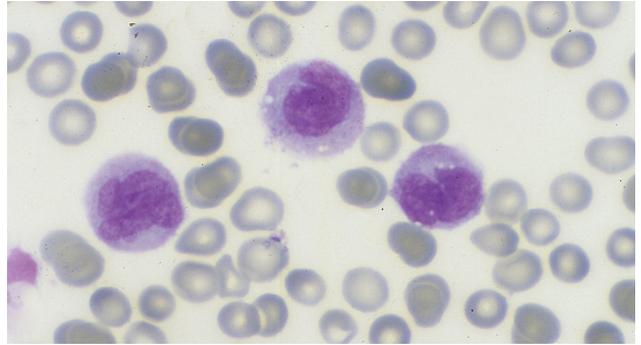


Figure 7

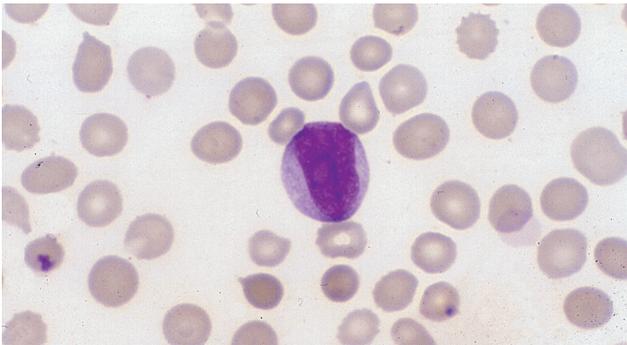


Figure 4

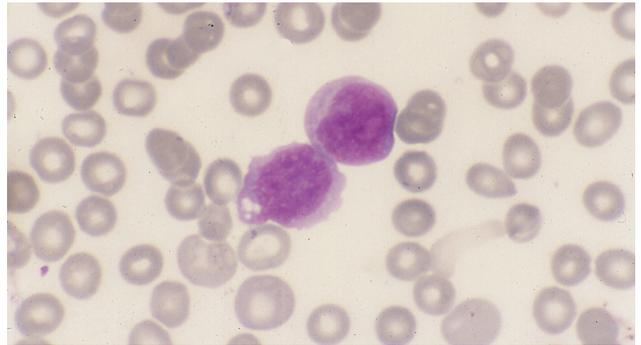


Figure 8

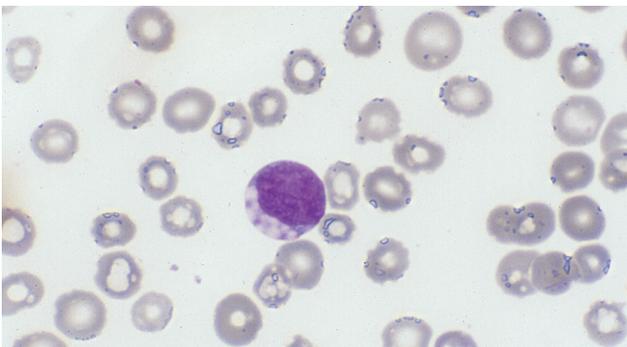


Figure 5



Figure 9

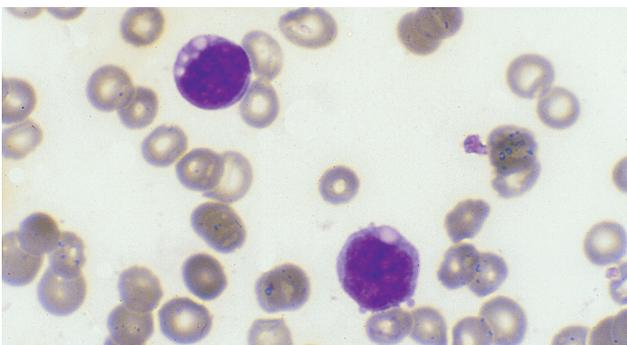


Figure 6

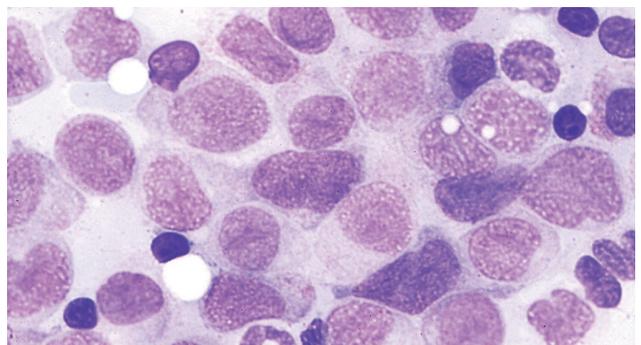


Figure 10

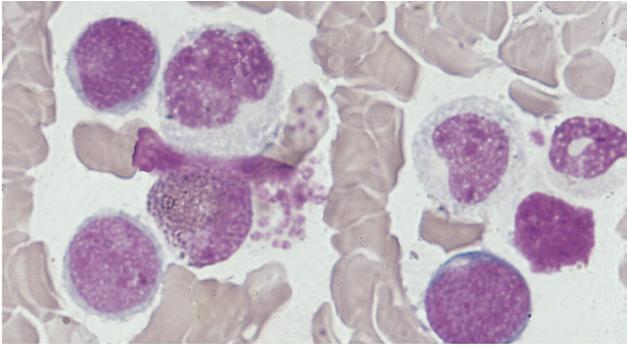


Figure 11

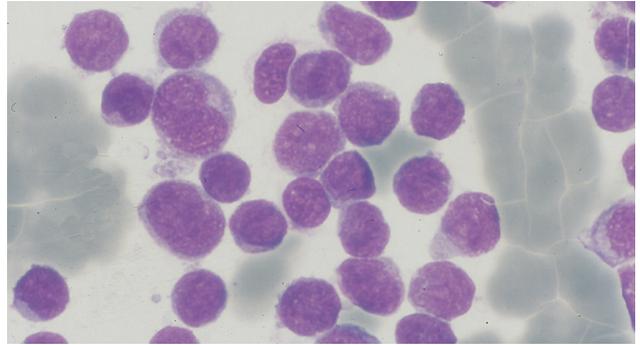


Figure 14

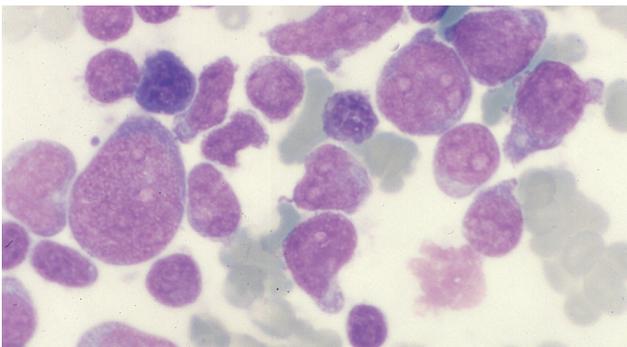


Figure 12

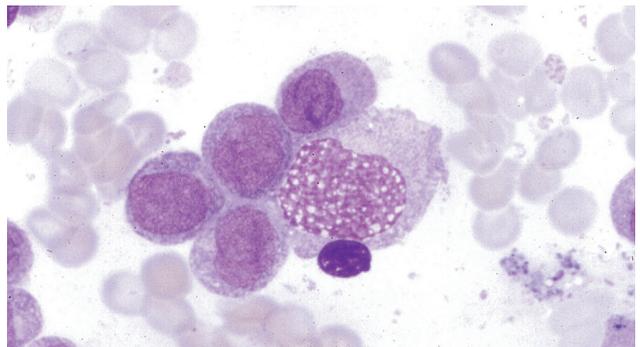


Figure 15

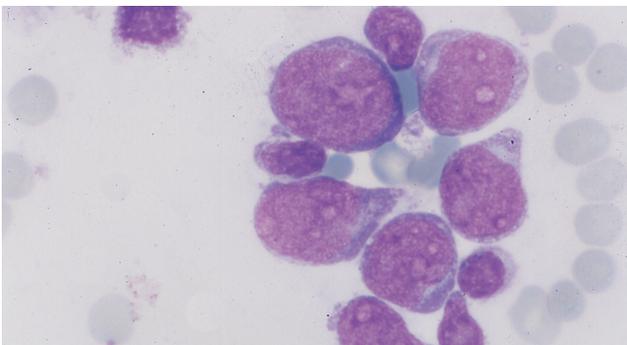


Figure 13

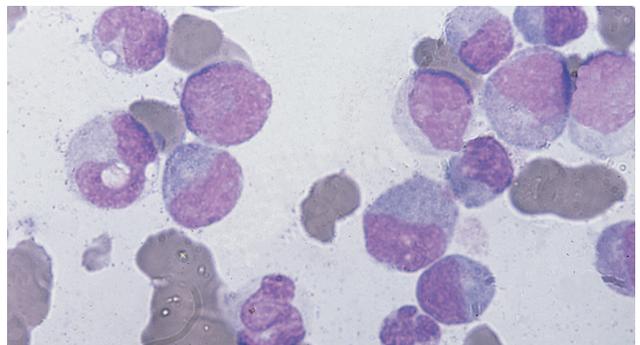


Figure 16

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