

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

---

### Hematology-Cell Morphology – Case 9

(A)

Cell size of 10–18  $\mu\text{m}$ , with a round or oval nucleus containing a fine chromatin appearance and 1–2 well visible pale blue or colorless nucleoli, and scanty toward one side with developed light basophilic cytoplasm (more peripheral basophilia) without granulation. The nuclear-cytoplasmic (N/C) ratio is approximately 6:1. T-cell: size of 10–12  $\mu\text{m}$ , with a relatively high N/C ratio (figures 1 to 6).

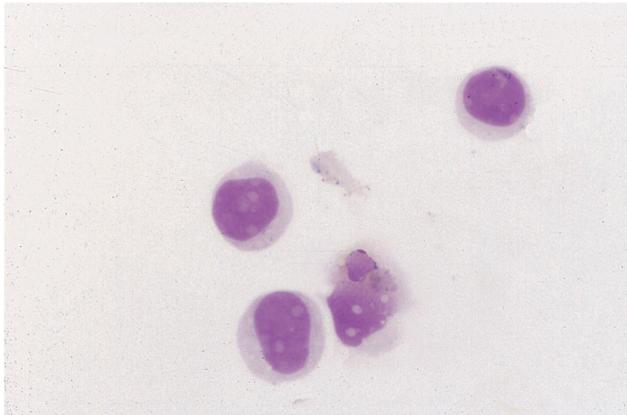


Figure 1

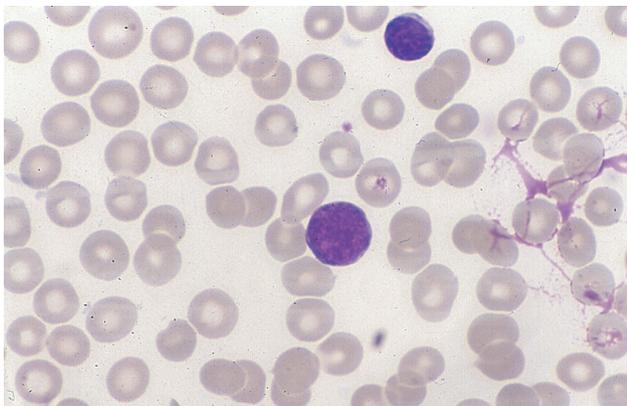


Figure 2

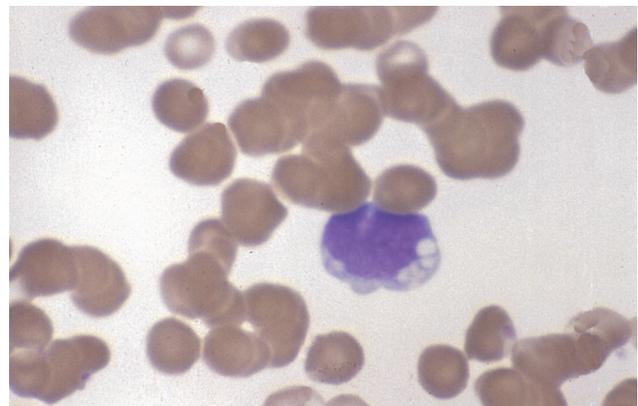


Figure 3

ARCHIVES OF HELLENIC MEDICINE 2021, 38(1):141–144  
ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2021, 38(1):141–144

---

**J.V. Asimakopoulos,  
L. Papageorgiou,  
P.M. Arapaki,  
C. Chatzidimitriou,  
M. Belia,  
E. Konstantinou,  
D. Galopoulos,  
J. Drandakis,  
A. Machairas,  
A. Kopsaftopoulos,  
A. Georgopoulou,  
A. Karapaschalidis,  
I. Vasilopoulos,  
A. Piperidou,  
F. Panitsas,  
K. Benekou,  
E. Sinni,  
M.P. Siakantaris,  
P. Tsaftaridis,  
E. Plata,  
T.P. Vassilakopoulos,  
M.K. Angelopoulou,  
K. Konstantopoulos,  
J. Meletis**

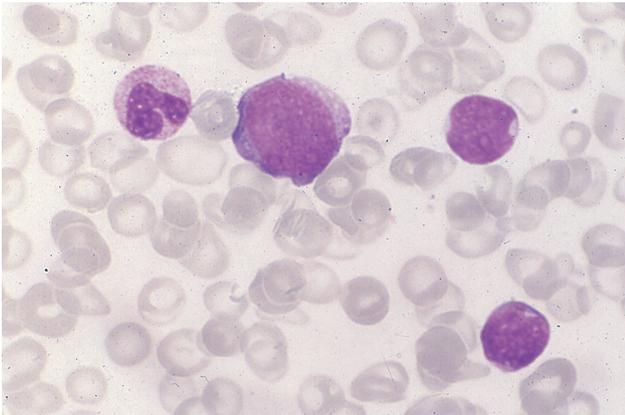
---

*Hematology Department and Bone Marrow Transplantation Unit, National and Kapodistrian University of Athens, School of Medicine, "Laikon" General Hospital, Athens, Greece*

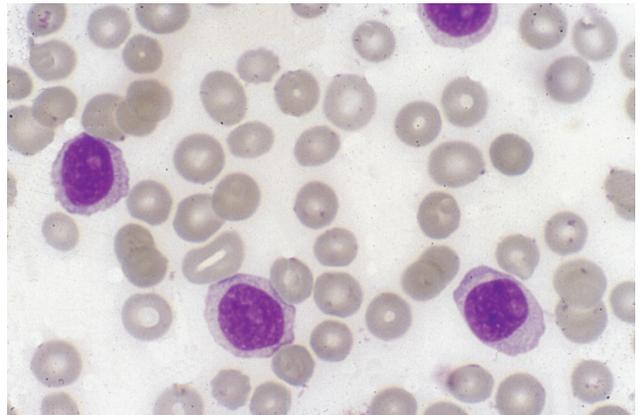
**(B)**

It may be differentiated to a B lymphoblast or towards a mature B lymphocyte without passing from the blast stage. Size of 9–17  $\mu\text{m}$ , N/C ratio approximately 4.5:1, with a nucleus usually

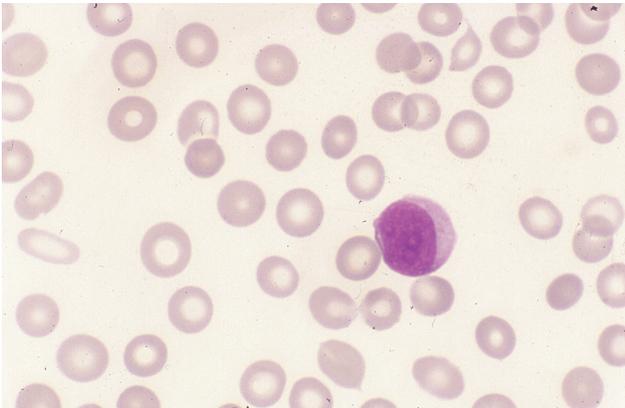
containing one nucleolus and basophilic cytoplasm, containing few azurophilic granules. A pre-T cell can be differentiated to a T lymphoblast or towards a mature T lymphocyte without passing from the blast stage (figures 7 to 12, 15, 18).



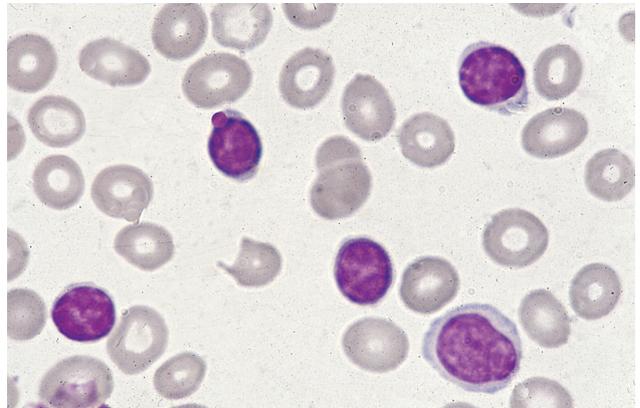
**Figure 4**



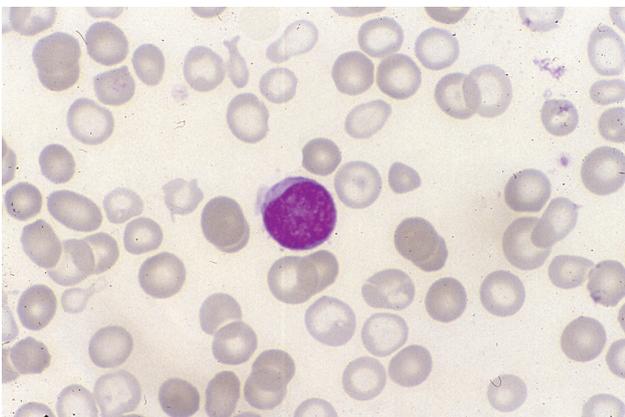
**Figure 7**



**Figure 5**



**Figure 8**



**Figure 6**

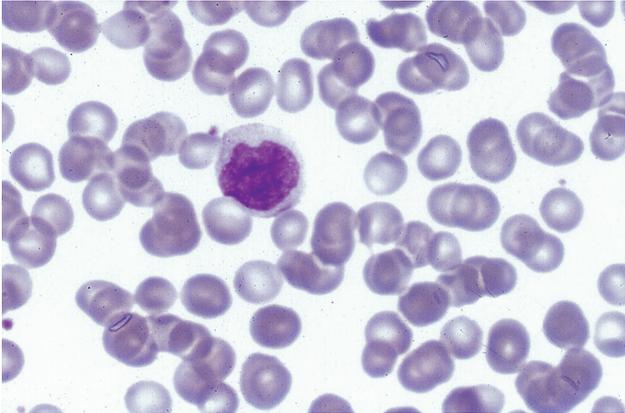


**Figure 9**

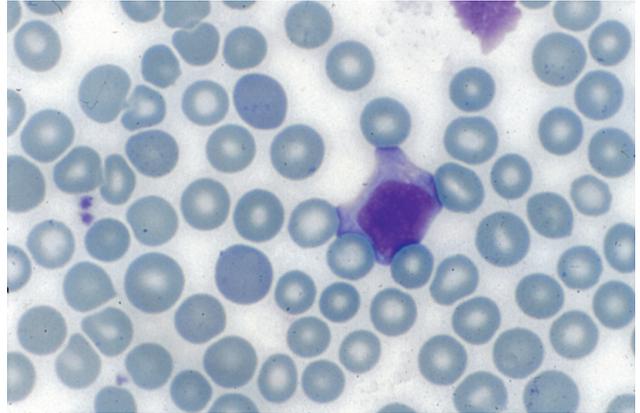
**(C)**

Cell measuring 10–12 μm with a relatively large round, oval or reniform nucleus, with heavy chromatin pattern without nucleoli (pseudonucleoli are usually visible) and basophilic cytoplasm containing few azurophilic granules. The number of B and T lymphocytes in the peripheral blood is of 1.5–3.5×10<sup>9</sup>/L and

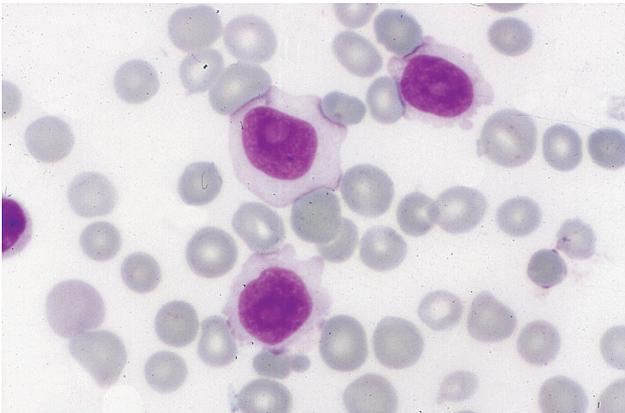
the majority represents T cells. The bone marrow percentage of B and T lymphocytes is 5–20% (the percentage increases with age). The circulating lymphocytes are produced in lymph nodes, spleen, thymus and in the lymphoid tissue of the gastrointestinal and respiratory tract. A T-cell: size of 10–12 μm, with a relatively high N/C ratio (figures 2, 8, 11 to 18).



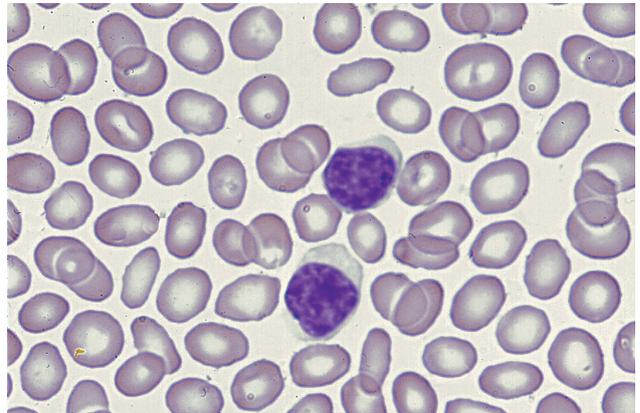
**Figure 10**



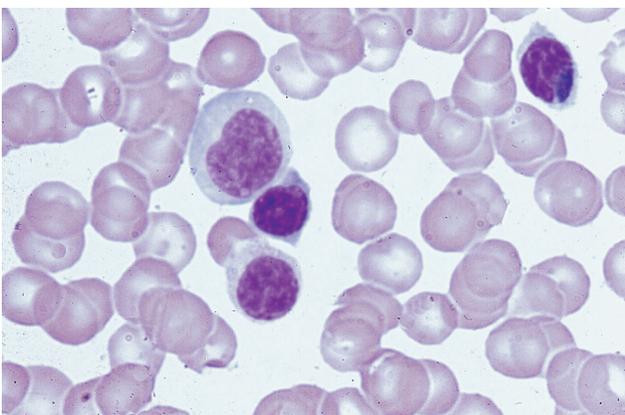
**Figure 13**



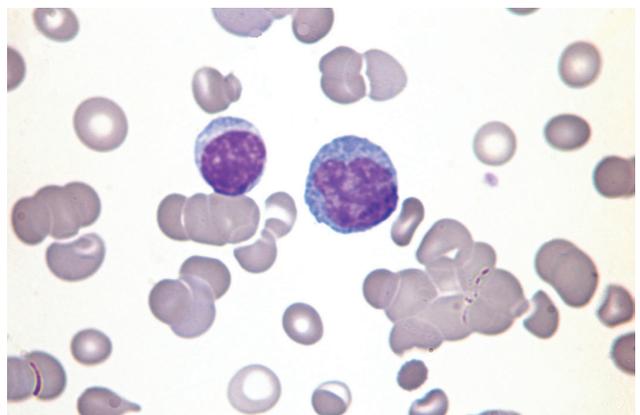
**Figure 11**



**Figure 14**



**Figure 12**



**Figure 15**



Figure 16

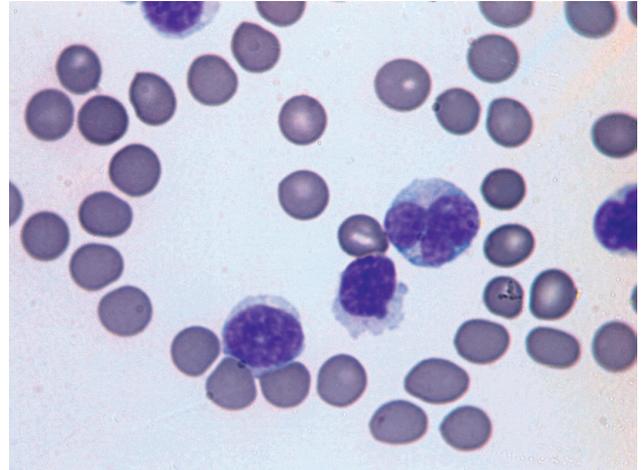


Figure 18

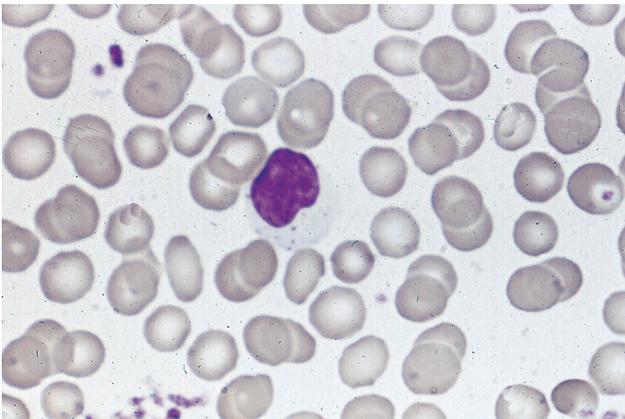


Figure 17

## References

1. MELETIS J. *Atlas of hematology*. 3rd ed. Nireas Publ Inc, Athens, 2009:47–54

### Corresponding author:

J. Meletis, Hematology Department and Bone Marrow Transplantation Unit, National and Kapodistrian University of Athens, School of Medicine, "Laiko" General Hospital, Athens, Greece  
e-mail: imeletis@med.uoa.gr