ARCHIVES OF HELLENIC MEDICINE: ISSN 11-05-3992

CONTINUING MEDICAL EDUCATION
ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Hematology Quiz – Case 43

ARCHIVES OF HELLENIC MEDICINE 2015, 32(5):665–667
ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2015, 32(5):665–667

J.V. Asimakopoulos,
L. Papageorgiou,
V. Telonis,
A. Zannou,
P.M. Arapaki,
T. Giannikos,
E. Nikolaou,
G. Dryllis,
I. Konstantinou,
A. Benekou,
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, "Laiko" General Hospital, Athens, Greece

A 71-year-old man with a 1-year history of fatigue, weakness, recurrent cutaneous plaques and severe bone pain mainly along the spine (lumbar region and shoulders bilaterally) was admitted to our Department. Laboratory examinations at that moment showed anemia and multiple gastric ulcers following gastroscopy.

On examination he was pale, with mild hepatosplenomegaly, multiple small lymph nodes, cutaneous plaques (violaceous, raised, non tender) in the skin of the arms, the legs and the back (figures 1, 2). His hematological tests revealed a normocytic normochromic anemia (Ht: 28.9%, Hb: 9.5 g/dL, WBC 5.100/μL [neutrophils: 43%, lymphocytes: 36%, basophils: 1%, monocytes: 1%, blasts: 19%] (some of them contained large granules) (figures 3, 4), and erythroblasts 8/100 cells) and PLT 45.000/μL. The erythrocyte sedimentation rate was 135 mm/1h. Coagulation studies were normal. His biochemical tests were: BUN 65 mg/dL, creatinine 2.2 mg/dL, SGOT 39 IU/L, SGPT 34 IU/L, LDH 1,376 IU/L, ALP 153 IU/L, γ-GT 39 IU/L, Na^+ 140 meq/L, K^+ 4.5 meq/L, Ca^{++} 6.2 mg/dL, serum total proteins 9.9 g/dL (albumin: 4 g/dL, globulins: 5.9 g/dL). The serum protein electrophoresis revealed a very small spike in the area of α-globulins. The aspiration of bone marrow was dry tap and some smears were obtained from the material of the biopsy showed infiltration of blasts (figures 5–7) [MPO (fig. 8), PAS (figures 9, 10), and NSE (fig. 11)]. The blasts expressed CD33 (36%), CD13 (21%), and CD15 (18%). The cytogenetic and molecular study for Ph^1 and bcr/abl were negative.

The patient obtained CR with vincristine-prednisolone treatment with simultaneous H_2-recepror antagonists.

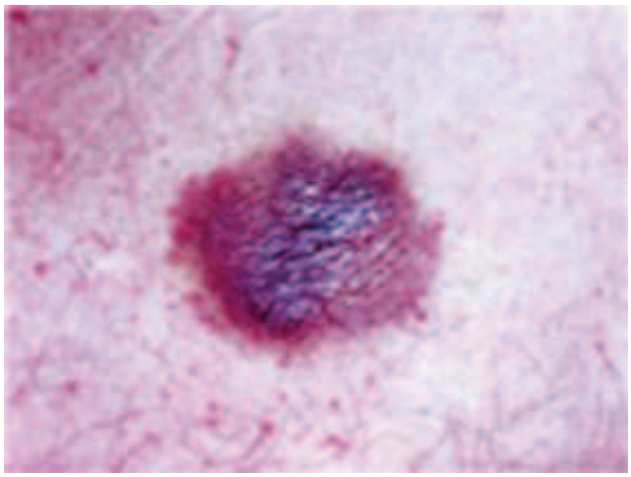

Figure 1

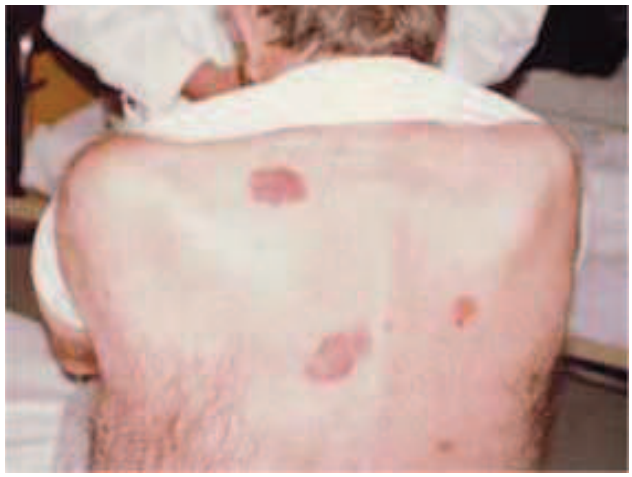

Figure 2

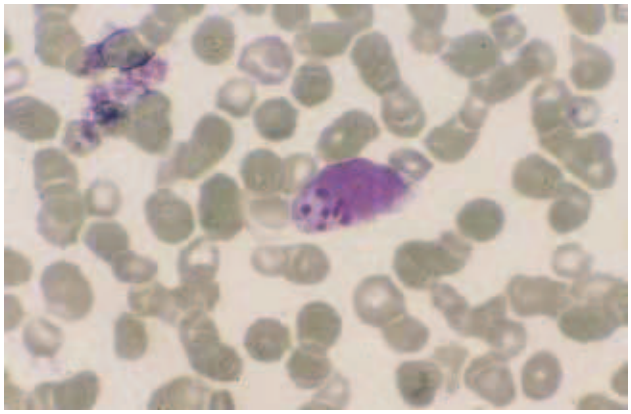

Figure 3

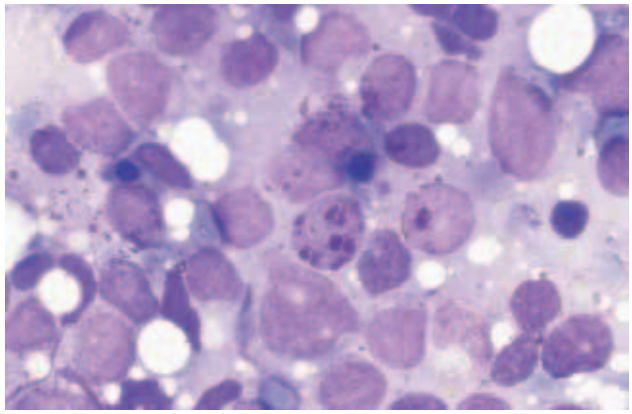

Figure 6

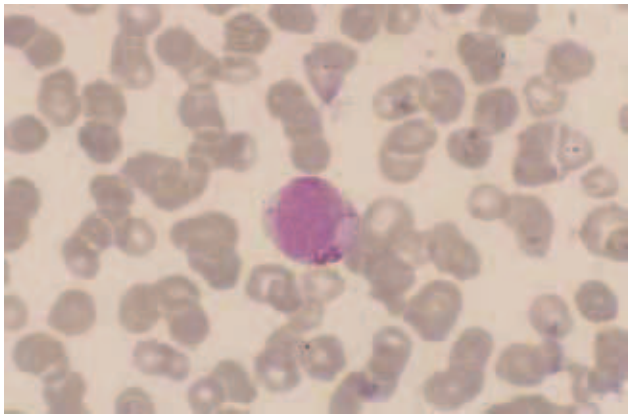

Figure 4

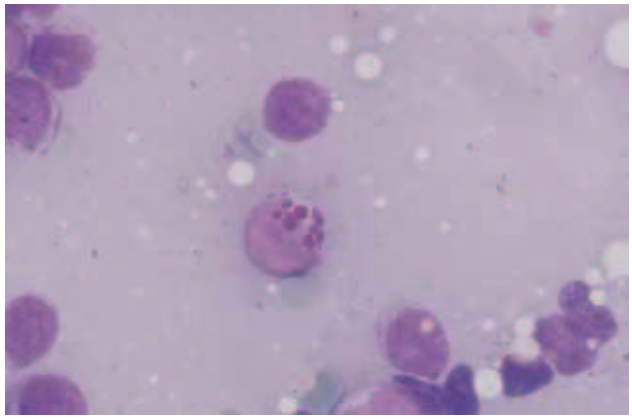

Figure 7

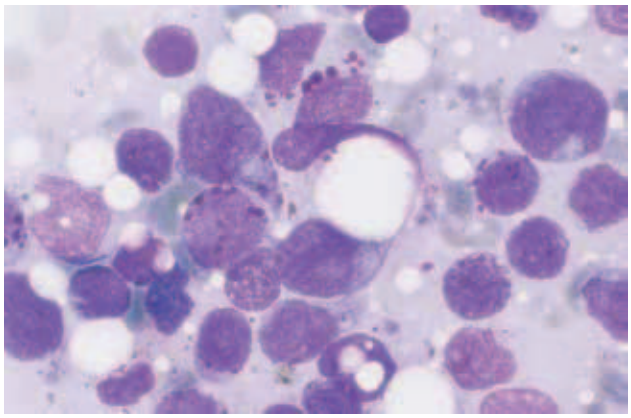

Figure 5

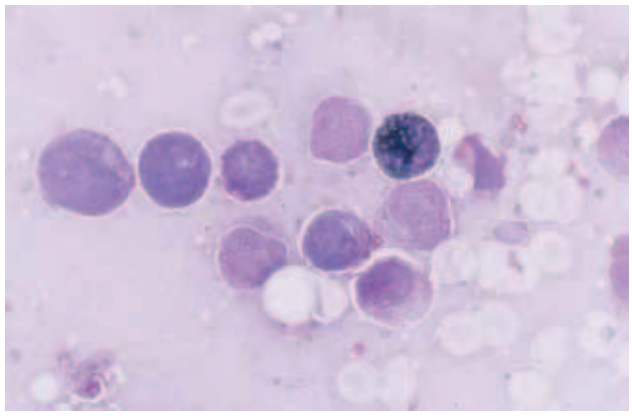

Figure 8

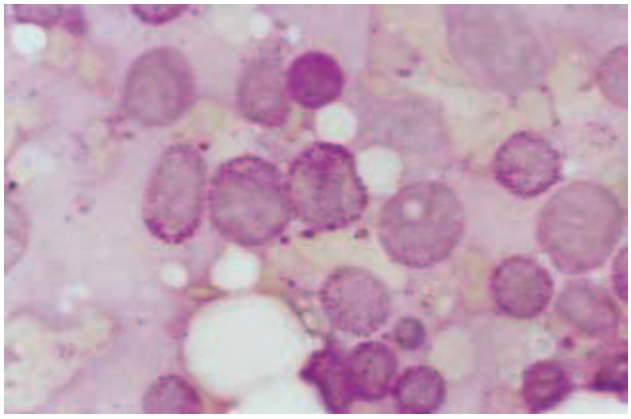

Figure 9

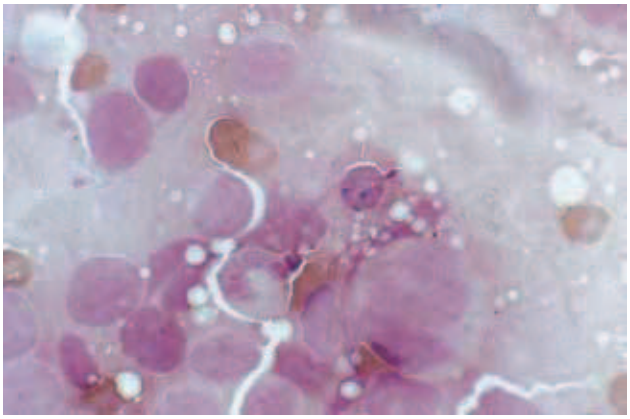

Figure 11

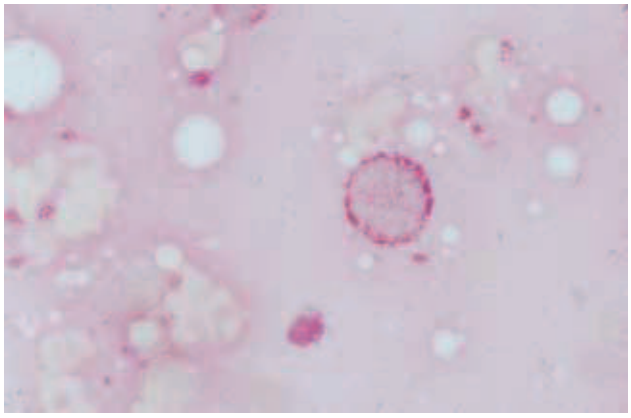

Figure 10

References

1. MELETIS J. *Atlas of hematology.* 3rd ed. Nireas Publ Inc, Athens, 2009:404–410
2. LUO XH, ZHU Y, TANG XQ. Acute basophilic leukemia presenting with maculopapular rashes and a gastric ulcer: A case report. *Oncol Lett* 2014, 8:2513–2516
3. EVEILLARD M, DESJONQUERES A. Acute basophilic leukemia. *Blood* 2014, 123:3071
4. RASHID A, SADRODDINY E, YE HT, VRATIMOS A, SABBAN S, CAREY E ET AL. Review: Diagnostic and therapeutic applications of rat basophilic leukemia cells. *Mol Immunol* 2012, 52:224–228
5. STAAL-VILIARE A, LATGER-CANNARD V, RAULT JP, DIDION J, GRÉGOIRE MJ, BOLOGNA S ET AL. A case of *de novo* acute basophilic leukaemia: Diagnostic criteria and review of the literature. *Ann Biol Clin (Paris)* 2006, 64:361–365

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, tel.: +30 210 74 66 902, fax: +30 210 7456698, e-mail: imeletis@med.uoa.gr