



HEMATOLOGY, TRANSFUSION AND CELL THERAPY

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Images in Clinical Hematology

Pseudogaucher cells in a patient with α -thalassemia minor and S-hemoglobin carrier

Verónica Roldán Galiacho ^{a,*}, Maite Moreno Gamiz ^a,
Juan Carlos García-Ruiz ^{a,b}

^a Department of Hematology, Cruces University Hospital, Barakaldo, Bizkaia, Spain

^b BioCruces Health Research Institute, Barakaldo, Bizkaia, Spain

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A 38-year-old woman, natural from Nigeria, known case of alpha-Thalassemia minor, S hemoglobin carrier, and chronic renal failure was remitted due decreasing hemoglobin level. She was in treatment with erythropoietin and endovenous iron. Laboratory tests showed: hemoglobin of 95 g/L, platelets of $130 \times 10^9/L$ and white blood cells $4.1 \times 10^9/L$, reticulocytes 1.7%, lactate dehydrogenase 273 IU/L (slightly increased) and glomerular filtration 3 mL/min/1.73 m². Bone marrow smear showed a hypercellular marrow with increased erythroid precursors without dysplastic changes and incidental Pseudo-Gaucher cells (PGC) (Figure 1 A-B, May-Grumwald-Giemsa

x1000). Bone marrow biopsy did no evidence fibrosis nor infiltration.

PCG are histiocytes with round contour and cytoplasm resembling “onion layers”. By morphology PCG are indistinguishable from true Gaucher cells. PCG are found in cases with high cell turnover. The presence of PCG has been documented in different hematological diseases being most common chronic myeloid leukemia but also in myelodysplastic syndromes, myeloma and other lymphoproliferatives, myelofibrosis and major thalassemia.^{1,2}

* Corresponding author at: Department of Hematology, Cruces University Hospital, Barakaldo, Bizkaia, 48903, Spain.

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E-mail address: veronica.rol dangaliacho@osakidetza.eus (V. Roldán Galiacho).

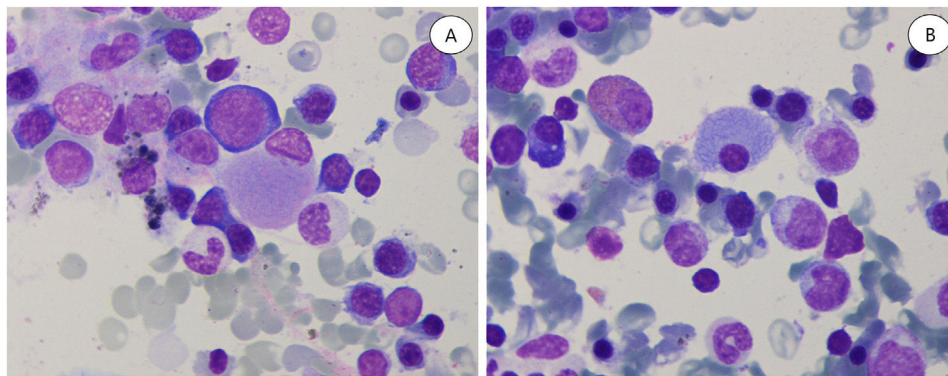


Figure 1 – A & B. Bone marrow smear (MGGx1000). Pseudogaucher cells: big cells with large cytoplasm with onion layers appearance and eccentric nuclei.

Conflicts of interest

The authors of this paper have no conflicts of interest, including specific financial interests, relationships, and/or affiliations relevant to the subject matter or materials included.

REFERENCES

1. Sharma P, Khurana N, Singh T. Pseudo-Gaucher cells in Hb E disease and thalassemia intermedia. *Hematology*. 2007;12(5):457–9. <https://doi.org/10.1080/10245330701393675>. PMID: 17852447.
2. Bain BJ, Lee L. Pseudo-Gaucher cells in sickle cell anemia. *Am J Hematol*. 2010;85(6):435.. <https://doi.org/10.1002/ajh.21647>. PMID: 20143404