



Images in Clinical Hematology

Reed-Sternberg and Hodgkin cells in bone marrow aspirate from a classical Hodgkin lymphoma patient

Leonardo Rodrigues Oliveira *, Gabriela Cristina Carmona Hinojosa ,
Renata Margarida Etchebehere 

Universidade Federal do Triângulo Mineiro (UFTM), Uberaba, MG, Brazil

ARTICLE INFO

Article history:

Received 19 December 2020

Accepted 2 February 2021

Available online 21 April 2021

A 78-year-old man was referred for evaluation of severe anemia (hemoglobin concentration 6.7 g/dL) and thrombocytopenia (8×10^9 /L), bilateral axillary adenomegaly, and massive hepatosplenomegaly. Bone marrow aspirate revealed trilineage hematopoiesis and the presence of giant bilobed nucleus cells with prominent eosinophilic inclusion-like nucleoli surrounded by lymphocytes (rosetting formation) and large mononuclear cells, resembling Reed-Sternberg and Hodgkin cells, respectively (Figure 1). Axillary lymph node biopsy confirmed classical Hodgkin lymphoma (cHL) diagnosis (CD15+, CD30+, CD20-, CD45-). Bone marrow infiltration by cHL was confirmed by biopsy (Figure 2).

Detection of cHL tumor cells in the bone marrow aspirate is uncommon, possibly due to scattered focal lesions and the fibrotic nature of the disease.^{1,2} Multiple tumor-infiltrating T cells in rosetting arrangement suggest an ineffective T cell response against cHL.³

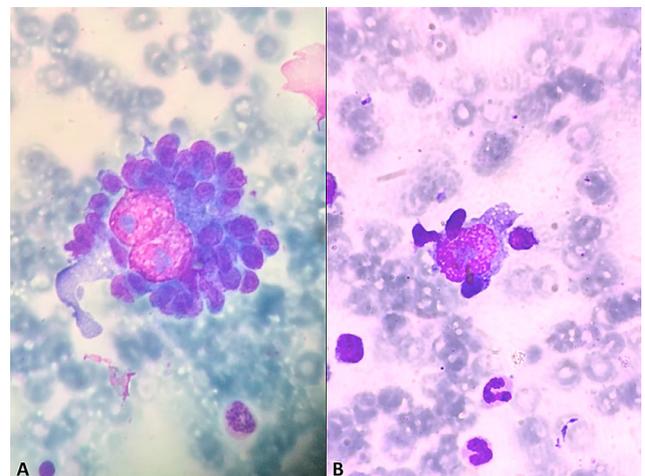


Figure 1 – (A) Reed-Sternberg Cell. Large cell surrounded by multiple lymphocytes in a rosetting formation. (B) Hodgkin Cell. Atypical mononuclear cell flanked by some lymphocytes. Bone marrow aspirate, Leishman stain, 1000 × magnification.

* Corresponding author at. Leonardo Rodrigues Oliveira Rua Getúlio Guaritá, 130 38025-440 Uberaba, MG, Brazil

E-mail address: leonardo.oliveira@ebserh.gov.br (L.R. Oliveira).

<https://doi.org/10.1016/j.htct.2021.02.002>

2531-1379/© 2021 Associação Brasileira de Hematologia, Hemoterapia e Terapia Celular. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

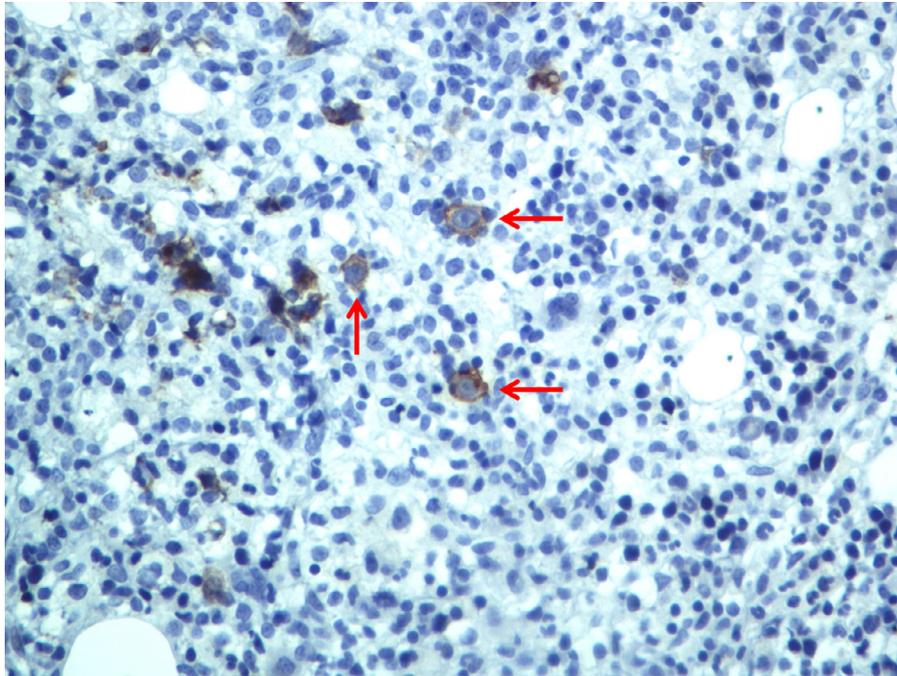


Figure 2 – Immunohistochemistry analysis for CD30 is positive in Reed – Sternberg and Hodgkin cells (arrows). Bone marrow biopsy, 400 × magnification.

Conflicts of interest

The authors declare no conflicts of interest.

REFERENCES

1. Zhaodong Xu, Burns BF, Faught C. Reed-Sternberg cells detected in the bone marrow aspirate in a young patient with nodular sclerosis Hodgkin lymphoma. *Eur J Haematol.* 2014;92(4):365–6. <https://doi.org/10.1111/ejh.12180>.
2. Lee SG, Paik SY, Sohn HJ, Kim SY, Kong SY. Numerous reed-sternberg cells in bone marrow aspirate from a patient with the syncytial variant of nodular sclerosis classical Hodgkin lymphoma. *Int J Hematol.* 2015;101(2):107–8. <https://doi.org/10.1007/s12185-014-1727-3>.
3. Vardhana S, Younes A. The immune microenvironment in Hodgkin lymphoma: t cells, B cells, and immune checkpoints. *Haematologica.* 2016;101(7):794–802. <https://doi.org/10.3324/haematol.2015.132761>.