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Gumprecht cells and B-cells lymphoproliferative diseases

Células de Gumprecht e doenças linfoproliferativas B crônicas

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B-cell lymphoproliferative diseases are a group of similar disorders that have particular clinical and laboratory characteristics. The most representative is classic chronic lymphoid leukemia (CLL).[1]

CLL is a heterogeneous disease that affects elderly patients with three to five cases for every 100 million people per year however this number rises to 20 cases per 100 million in over 70-year-old individuals; thus it is the most common leukemia in Western countries. The number of cases of the disease is increasing partly because of changes in the habits of the population, but mainly due to the reduction in the minimum number of peripheral lymphocytes used in its diagnosis.[2-5] The diagnosis of CLL and the differential diagnosis of chronic lymphoproliferative syndromes depends largely on laboratory tests and immunophenotyping. Cytogenetic and molecular studies are fundamental to the study of these diseases and in treating patients LLC.[6] Besides the classical clinical stages, such as Rai and Binet, the immunoglobulin variable heavy chain (IgVH) mutational status,[7] ZETA-associated protein-70 (ZAP-70)[8] and genomic aberrations[6] are important predictors that guide the treatment of patients. In the clinical practice, we are used to seeing patients in a good general condition, asymptomatic, often with symmetrical nodes and spleen, but with a need to find an explanation for leukocytosis associated with lymphocytosis in peripheral blood. The conventional microscopy technique consists of morphologically normal lymphocytes and Gumprecht spots, rejecting the possibility of a technical artifact thereby diagnosing classical LLC or suspicion of a chronic lymphoproliferative disease.

In this issue of the Brazilian Journal of Hematology and Hemotherapy, Matos and colleagues[9] remind us of the history of hematology, of the trivial but important nuclear shadow or Gumprecht cells as have been cited in works since 1896. Whether the presence of Gumprecht cells is tantamount to the diagnosis of CLL was determined by analyzing 125 patients predominantly with the diagnosis of CLL and patients with other B cell lymphoproliferative diseases. Systematically they try to gauge the existence of a percentage cut off point (10, 20 or 30%) for the differential diagnosis between B cell lymphoproliferative disorders and CLL and concluded that this myth in the hematological clinical practice is not supported by the observed data.

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