

Idiopathic cytopenia of undetermined significance and systemic lupus erythematosus

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Idiopathic cytopenia of undetermined significance (ICUS) is characterized as less than 10% of dysplasias with less than 5% blasts in the bone marrow, however, it may be present heterogeneously. Until the present, only a small number of cases have been published and knowledge about the mechanisms and prognosis is scarce⁽¹⁾. Systemic lupus erythematosus (SLE) is an autoimmune disease that affects multiple organ systems, including the bone marrow⁽²⁾. Data on changes in the bone marrow in patients with SLE are scarce and inconsistent, but mainly involve hypoplasia, hyperplasia, vasculitis, lymphocytosis/plasmacytosis, myelofibrosis, pure red cell aplasia and dyserythropoiesis. Dysplastic changes in all hematopoietic lineages and peripheral cytopenias have also been described in SLE patients; however, they seem to be reversible with remission of the disease^(2,3). Figure 1 illustrates a case of one 18-year-old female patient with persistent refractory cytopenia and mild dysplasia in the three hematopoietic lineages compatible with ICUS. After three years of follow up she was strongly positive for antinuclear antibodies and evolved with glomerulonephritis, characterizing SLE. Figures 2A & B illustrate the cytogenetic analysis with karyotyping by G-band and Fluorescence in situ Hybridization (FISH) for 5q- negative.

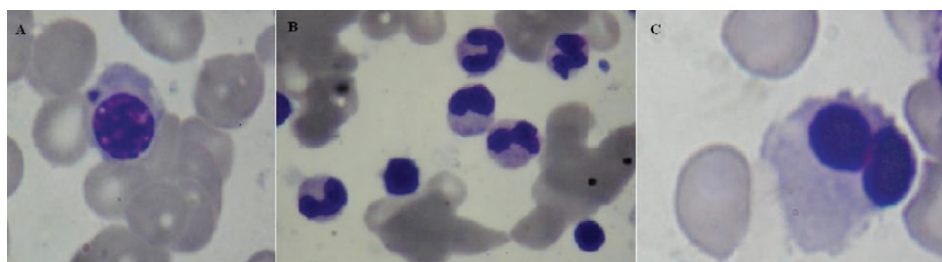


Figure 1 – Dysplastic changes of the erythroid, granulocytic and megakaryocytic lineages in bone marrow aspirate
 (A) Dyserythropoiesis; (B) Dysgranulopoiesis; (C) Dysmegakaryopoiesis; May-Grunwald-Giemsa staining. Magnification: 100x

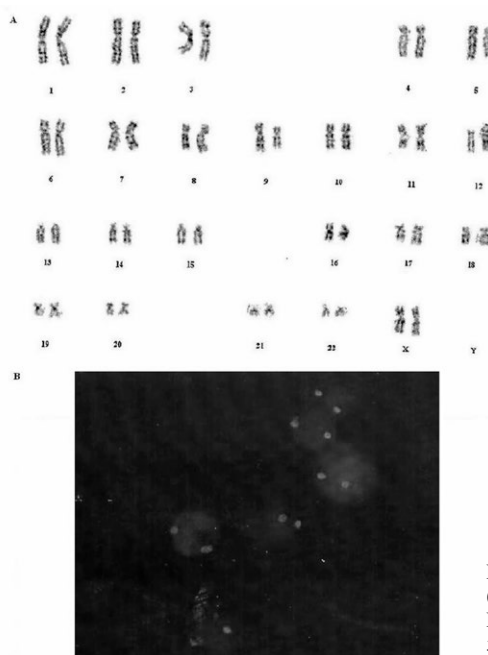


Figure 2 – Cytogenetic analysis
 (A) karyotype by G-band (46,XX [20]); (B) Fluorescence in situ Hybridization (FISH) for 5q- negative.

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