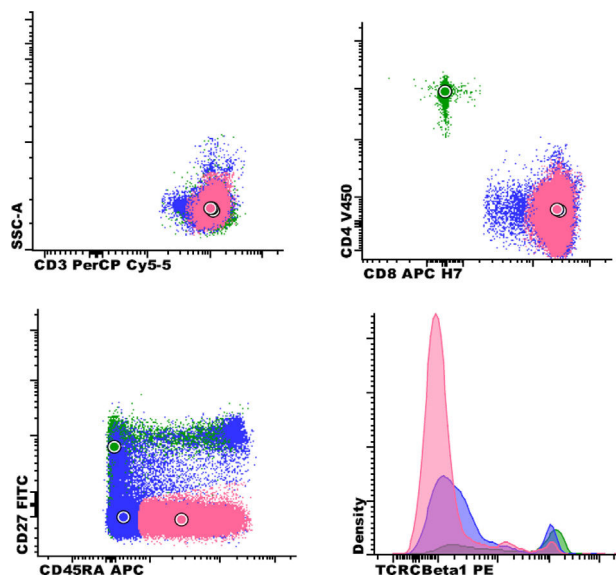


cells/ μ L - normal age range 2-323) CD45RA(-) CD27+ TCRCBeta1+5% (monoclonal). *4.9% TCD4+ TCRCBeta1+44% (polyclonal). **Immunophenotype:** CD45++ CD3+ CD8+ CD38dim CD45RA-/+ CD45RO-/+ CD2+ CD5++ CD7+FR TCR ALPHA-BETA+ PERFORIN+ TCRCBETA1 ++5%; Negative expression: CD25 CD26 CD27 CD28 TCL1 CCR7 TCR GAMMA-DELTA CD11C CD30 CD16 CD56 CD94. **Morphology:** In the analyzed smear, 32% of atypical medium-sized lymphoid cells were observed, with a globose nucleus, generally eccentric, with poorly condensed chromatin with an outline of a nucleolus, and a moderately basophilic, polarized and granular cytoplasm. The initial diagnostic hypothesis was T-Lymphoma, NOS (the authors judged that there were no sufficient NK antigens expressed to characterize T-LGL). However, further investigation showed the patient had no identifiable T Cell lymphoma, and she eventually was diagnosed with Thrombotic Thrombocytopenic Purpura, with classic symptoms and laboratory confirmation. Since the implementation of TRBC1 for detection of abnormal T-cells, persistent clonal expansion of large granular lymphocytes (T-cell clones of uncertain significance/ T-CUS) have been reported in a variety of clinical conditions, such as hematological neoplasms and autoimmunity. The incidence of T-CUS increases with age, and probably represents reactive T-cell small clones (so called immunoclonal), with less than 20% of total lymphocytes or 400 cells/mm³, highly prevalent in patients without T-cell malignancy. Most reactive T-CUS cases are CD8+ or CD4+/CD8+ double-positive.



T-CUS in pink, normal TCD4+ cells in green and normal TCD8+ cells in dark blue.

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POST-TRANSPLANT DOUBLE-POSITIVE T-CELL LYMPHOMA

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Male patient, 54 years old, post-transplant immune profile, bone marrow transplantation for B-cell Non-Hodgkin's-Lymphoma in 2019 - Peripheral blood sample with white blood count 1,800 cells post-transplant immune profile - marked (42%) Double-Positive proliferation. **Panel design, Immunophenotyping and Gating Strategy:** Triage of all the samples was analyzed in the LST tube. The TCRCBeta 1 tube was designed based on EuroFlow's Orientation Tube for Immunodeficiencies (PIDOT), using CD3, CD4, CD8 and CD45 as "backbones", CD27 and CD45RA to discriminate T-cell subsets, CD16 and CD56 to exclude NK cells, and including TCRCBeta1 in the PE channel. **Results:** 57% T Cells: *42% Double-positive CD3+ CD7(-) CD27(-) CD45RA+ TCRCBeta1+100% (monoclonal); *7.5% TCD4+ EM CD45RA(-) CD27(-) TCRCBeta1+ 38% (polyclonal); *7.5% TCD8+ EM CD45RA(-) CD27(-) TCRCBeta1+ 38% (polyclonal). **Immunophenotype:** CD45+ CD3+ CD4+ CD8+ CD26-/+ CD45RA+ CD2+ CD5+ CD11C+ CD57-/+ TCD ALPHA-BETA+ TCRCBETA1+. Negative expression: CD7, CD28, CD45RO, CD25, CD30, TCRGAMA/DELTA, CCR7, CD56, CD16, TCL1. The abnormal Double-positive T-cell population was subsequently detected with a bone marrow sample. The diagnostic conclusion was T-cell Lymphoma, NOS.

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CASE REPORT: BICLONAL SÉZARY SYNDROME

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Introduction: Sézary Syndrome (SS) is defined by the triad of erythroderma, generalized lymphadenopathy, and the presence of clonal T cells with cerebriform nuclei (Sézary cells) in peripheral blood. In addition, one or more of the following criteria are required: an absolute Sézary cell count $\geq 1000/\mu$ L, an expanded CD4+ T-cell population resulting in a CD4:CD8 ratio of ≥ 10 , and loss of one or more T cell antigens. T cells have a CD3+, CD4+, CD8(-) phenotype, and characteristically lack CD7 and CD26. The normal counterparts of Sézary cells are circulating central memory T cells (CD27+, CD45RA(-), CD45RO+). According to the degree of circulating involvement, Staging B ("blood") for Sézary syndrome follow these