asymptomatic, and mainly characterized by cytopenias (primarily neutropenia, predisposing to infections). T-LGL leukemia patients may present with recurrent bacterial infections owing to (severe) neutropenia, anemia, and hepatosplenomegaly, but one-third of patients appear to be asymptomatic at diagnosis. T-LGL arrives from expansions of effectors T-cells, CD45RA+/CD28(-)/CD27(-)/CD94+/ – with variable expression of CD57, usually TCD8+ TCR Alpha/Beta. It is important to distinguish T-LGL from reactive LGL proliferation, which is frequent, particularly in the context of viral infections, autoimmune diseases, after splenectomy or in posttransplant patients. Diagnosis of LGL leukemia is based on two mandatory criteria which help to differentiate it from reactive LGL lymphocytosis: cytological identification of lymphocytes with granules >500 cells/mm3 observed at least over 6 months, and proof of clonality. **Report:** Female patient, 64 years old, leukocytosis, lymphocytosis and B-CLL suspicion, Peripheral blood sample with white blood count 35,500 cells - marked (93%) T Double-positive proliferation. **Results:** Flow Cytometry: 93% Double-positive CD4++ CD8+ CD3++ CD2++ CD5++ CD7-/+ CD27(-) CD45RA+ TCR Alpha/Beta+ TCRCBeta1+100% (monoclonal); dim expression of CD56 and CD57; Negative expression: CD25, CD26, CD27, CD28, CD45RO, CD94, CCR7, TCL1, TCR Gamma-Delta (Figure 1). **Morphology:** in the analyzed smear, predominance of atypical medium-sized lymphoid cells was 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 (Figure 1).

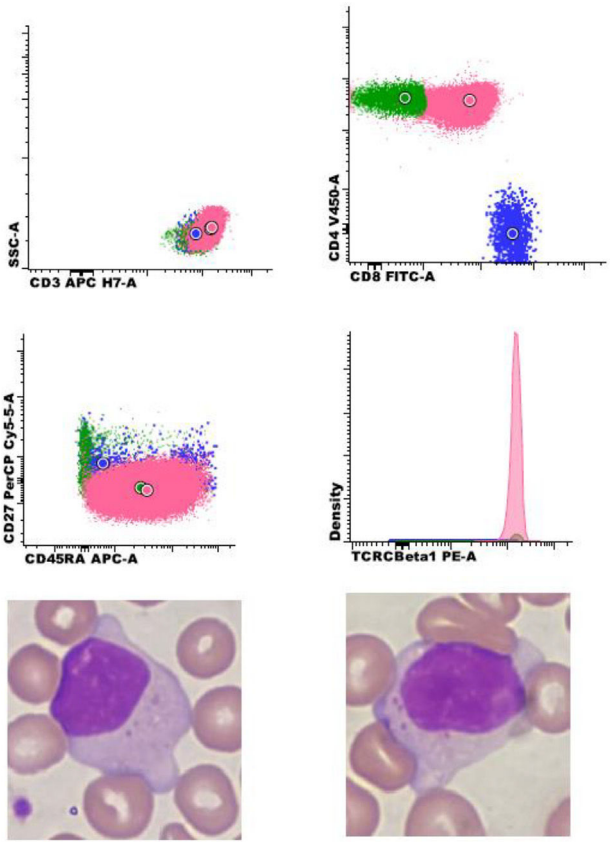

Figure 1 Flow Cytometry: Double-Positive LGL clone (pink; normal TCD4+ cells in green and normal TCD8+ cells in dark blue). Morphology: atypical medium-sized lymphoid cells was observed, with a globose nucleus, generally eccentric, with poorly condensed chromatin with an outline of a nucleolus, and a moderately basophilic, polarized and granular cytoplasm.

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Case Report: TCD8 Proliferation Secondary To CMV In A Post Transplant Patient.

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Introduction: CD4+ and CD8+ lymphocytes regenerate within the first year after Bone Marrow Transplant (BMT). The survival and peripheral expansion of donor memory T-cells transfused with the graft is the dominant mechanism in the first year after the BMT, with the predominant expansion of TCD8+ cells. This explains the inverted CD4/CD8 ratio detected in post-BMT patients. That is the reason why it is not a surprise to find elevated TCD8 cells in an immune profile of a patient submitted to bone marrow transplant. However, post-transplant patients are prone to viral infections, and CD8 T cells display unique profiles depending on their viral specificity: Cells are predominantly CCR7+ CD27+ CD28+ during latent infection with HCV, CCR7(-) CD27+ CD28+ in EBV, CCR7(-) CD27+ CD28(-) in HIV, and CCR7(-) CD27(-) CD28 (-) in CMV. **Report:** Female patient, 25 years old, Previous diagnosis of B-Acute Lymphoid leukemia, D+180 after bone marrow transplantation, post-stem cell transplant immune profile, with progressive lymphocytosis, Peripheral blood sample with white blood count 6,900 cells. **Results:** 58% T Cells (4/8 = 0.2): *46.2% TCD8+ TCRCBeta1+36% (polyclonal) 21.75% TD phenotype with increased absolute levels (1501 cells/μL - normal age range 1-384) CD45RA+ CD27(-), 21.45% EM phenotype with increased absolute levels (1480 cells/μL - normal age range 5-69) CD45RA(-) CD27(-), 0.2% *Naive* CD45RA + CD27+, 2.8% CM/TM CD45RA(-) CD27+; *9.8% TCD4+ TCRCBeta1+36,5% (polyclonal) 0.6% *Naive* CD45RA+ CD27+, 2.5% CM/TM CD45RA(-) CD27+, 0.1% TD CD45RA+ CD27(-, 6.6% EM CD45RA(-) CD27+ (Fig. 1). **Conclusion:** peripheral blood sample showing a relative (58%) and absolute (4,005/mm^3) increase in mature (CD3+) T lymphoid cells (CD45++), with a predominant phenotype (42%) of polyclonal effector (terminally differentiated) CD8+ T cells / memory effector cells (CD27(-) CD28(-) CCR7(-) CD45RA+/- CD45RO-/+), with negative CCR7/CD27/CD28 expression, a phenotype suggestive of viral infection, most likely CMV, later confirmed with serologic tests.

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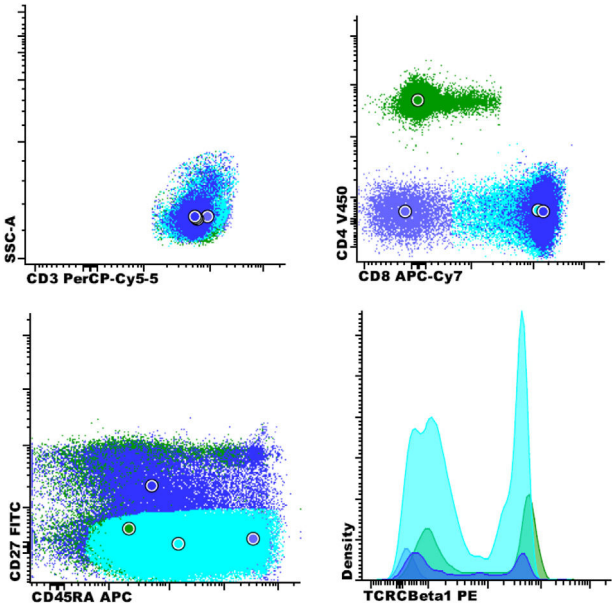

Figure 1 Normal double-negative Gamma/Delta cells in purple; normal TCD4+ cells in green; normal TCD8+ cells in dark blue; TD CD8+ cells in turquoise.

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CASE REPORT - T/NK LYMPHOMA

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Introduction: Less than 10% of chronic lymphoproliferative diseases are caused by T lymphocytes and NK cells. In addition to their rarity, the greatest obstacles to their identification have been the diversity and phenotypic complexity of these cells. Extranodal T/NK cell lymphomas are more common in adult men (mean age 44-54 years), originate from NK cells (or in some cases from cytotoxic T lymphocytes), and cause extensive vascular damage with prominent necrosis. They are strongly associated with Epstein-Baar virus (EBV) infection and involve the upper aerodigestive tract (mainly nasal cavity), skin, and lymph nodes. It is a highly aggressive lymphoma, with low survival rates and poor response to treatment. **Report:** Male patient, 42 years old, starts with cervical and inguinal lymph node enlargement. Underwent PET-CT