maintained. Discussion: This case is unique in that: • Sequential triple malignancy: PV, CLL, and EGFR-mutant NSCLC rarely occur together. • Therapeutic synergy: Dual-targeted therapy produced durable responses in both solid and hematological malignancies. • JAK2 loss: Post-treatment JAK2 negativity suggests clonal competition or epigenetic remission; parallels have been observed with interferon-alpha in MPN[5]. • Clinical implications: Supports feasibility of combinatorial targeted therapy in elderly with multiple malignancies. Clonal hematopoiesis of indeterminate potential (CHIP) and aging likely predisposed this patient to multiple neoplasms [^6]. The "clonal competition hypothesis" posits that dominant clones (e.g., NSCLC with EGFR mutation) may suppress other clones (JAK2+) via shared niche or resource limitation. Limitations include single-patient observation; further genomic investigation (e.g., NGS) could clarify clonal evolution mechanisms. We recommend longitudinal monitoring of allele burden and expanded studies on multi-targeted therapy interactions. Conclusion: Conclusion Elderly patients with multiple sequential malignancies can benefit from tailored, low-toxicity targeted therapies. The unexpected disappearance of JAK2 mutation invites further investigation into clonal dynamics and epigenetic remission phenomena. This case enriches our understanding of cancer ecology in aging patients.

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## OP 5

Autoimmune Hemolytic Anemia as the Presenting Feature of Chronic Lymphocytic Leukemia: Two Contrasting Cases Across Different Age Groups

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Introduction: Chronic lymphocytic leukemia represents the most common adult leukemia in Western countries, with autoimmune hemolytic anemia occurring as a complication in 5-10% of cases. AIHA as the presenting feature of CLL is uncommon, particularly in young adults where CLL incidence is extremely rare. The immunophenotypic heterogeneity of CLL, including atypical variants, may influence both clinical presentation and treatment response. Case Reports: Case 1: An 84-year-old female presented with progressive fatigue, weakness, and dyspnea. Laboratory evaluation revealed severe anemia (Hb: 9.3 g/dL), marked leukocytosis  $(42.36 \times 10^3/\mu L)$ , and thrombocytopenia. Direct antiglobulin test was strongly positive (3+), confirming warm-type AIHA. Flow cytometry demonstrated classic CLL immunophenotype: CD19+ (93%), CD5+ (95%), CD23+ (84%), CD20+ (52%), with absent CD38 expression suggesting favorable-risk disease. Bone marrow biopsy confirmed CLL/SLL with 50% infiltration. Treatment with prednisolone rapidly resolved hemolysis, followed by ibrutinib therapy for CLL. The patient achieved sustained remission over 12 months with corticosteroid discontinuation after 3 months. Case 2: A 25-year-old

male presented with dyspnea, palpitations, and fatigue. Initial workup revealed severe anemia (Hb: 7.8 g/dL), reticulocytosis (6.8%), and elevated LDH with spherocytes on peripheral smear. Direct antiglobulin test was strongly positive (4+). Investigation revealed lymphocytosis (14,200/mm<sup>3</sup>, 68% lymphocytes) with atypical CLL immunophenotype: CD5+/CD19 +/FMC7+/CD23-, distinguishing it from typical CLL while excluding mantle cell lymphoma through negative cyclin D1. TP53 abnormalities were absent. Initial prednisolone therapy provided insufficient response, prompting rituximab monotherapy (375 mg/m<sup>2</sup> × 4 cycles). The patient achieved complete hematologic response with hemoglobin normalization (11.6 g/dL), reticulocyte count resolution, and lymphocytosis improvement. Discussion: These cases illustrate important clinical principles in CLL-associated AIHA management. The elderly patient presented with classic CLL immunophenotype and favorable prognostic markers (CD38-negative), supporting the choice of BTK inhibitor therapy appropriate for her age and comorbidities. The young adult case demonstrated atypical CLL immunophenotype (FMC7+/CD23-), representing a variant phenotype that required careful differentiation from mantle cell lymphoma. The treatment approaches differed significantly based on age and disease characteristics. The elderly patient benefited from targeted therapy (ibrutinib) combined with corticosteroids, while the young patient achieved excellent response with rituximab monotherapy after steroid failure. This highlights the importance of individualized treatment selection based on patient factors and disease biology. Both cases emphasize the critical role of comprehensive flow cytometric analysis in patients presenting with unexplained AIHA, regardless of age. Early recognition of underlying CLL enables appropriate targeted therapy and optimal outcomes. The contrasting immunophenotypes demonstrate the heterogeneity of CLL, with both classic (CD5 +/CD23+) and atypical (CD5+/CD23-/FMC7+) variants capable of presenting with AIHA as the initial manifestation. Conclusion: AIHA may serve as the presenting feature of CLL across diverse age groups with varying immunophenotypic profiles. These cases underscore the importance of systematic flow cytometric evaluation in all AIHA patients and demonstrate that age-appropriate targeted therapies can achieve excellent clinical outcomes in both classic and atypical CLL variants.

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## OP 6

HHV-8 Positive Kaposi Sarcoma in a Myelofibrosis Patient Treated with Ruxolitinib: A Rare but Clinically Relevant Association

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Introduction: Kaposi sarcoma (KS) is a rare vascular tumor strongly associated with human herpesvirus 8 (HHV-8) and typically seen in immunocompromised states such as HIV/AIDS or post-transplant settings. However, with the increasing use of immunomodulatory therapies in hematologic