CR25 Simultaneous Occurrence of Acute Myeloid Leukemia and Chronic Lymphocytic Leukemia: A Case Report

Stjepan Galić[a], Ozren Jakšić[a,b]

[a] *School of Medicine, University of Zagreb, Zagreb, Croatia*
[b] *Department of Hematology, University Hospital Dubrava, Zagreb, Croatia*

DOI: https://doi.org/10.26800/LV-145-supl2-CR25

Stjepan Galić 0000-0002-9150-7370, Ozren Jakšić 0000-0003-4026-285X

KEYWORDS: acute myeloid leukemia; chronic lymphocytic leukemia; hematology

INTRODUCTION/OBJECTIVES: Concurrent development of acute myeloid leukemia (AML) and chronic lymphocytic leukemia (CLL) is very rare. We present a case of simultaneous CLL and AML in a patient with no prior exposure to cytotoxic agents or irradiation.
CASE PRESENTATION: A 78-year-old female patient was admitted to the hospital with complaints of chest tightness and a dry cough. The physical exam revealed a systolic murmur, late inspiratory crackles in the left lung, discrete pretibial edema, and no organomegaly. The patient was subfebrile. Past medical history included diabetes type 2, hypertension, and osteoporosis. The chest X-ray revealed infiltrates and pleural effusion, suggesting pneumonia. The complete blood count revealed leukopenia ($2x10^9$/L), macrocytic anemia (hemoglobin of 87 g/L, MCV 102 fL), neutropenia ($0.2x10^9$/L), and a platelet count of $332x10^9$/L. Bone marrow aspiration and biopsy revealed 36% of myeloblasts, which confirmed the diagnosis of AML. An additional leukemic population of cells was detected by immunophenotyping consistent with the diagnosis of CLL. MSCT scan revealed a minor pericardial effusion and no signs of lymphadenopathy or organomegaly. Venetoclax and azacitidine were started for the treatment of AML. Venetoclax, a bcl-2 antagonist, is effective for the treatment of both AML and CLL. The patient achieved remission of both AML and CLL and has been receiving continuous treatment for the past five years.
CONCLUSION: In conclusion, this case shows that targeting an important antiapoptotic pathway may lead to remission of both (unrelated) leukemias, i.e. hitting two targets with one arrow.

CR26 Spontaneous pneumomediastinum and pneumopericardium in a young female: a case report

Mihovil Santini[a], Lana Nikše[b], Pavao Mioč[b], Jakov Santini[c], Iva Tokić[a], Ivan Zeljković[b]

[a] *Institute of emergency medicine of Krapina-Zagorje County, Krapina, Croatia*
[b] *Department of Cardiology, Sestre milosrdnice University Hospital Centre, Zagreb, Croatia*
[c] *School of Medicine, University of Zagreb, Zagreb, Croatia*

DOI: https://doi.org/10.26800/LV-145-supl2-CR26

Mihovil Santini 0000-0002-1428-4484, Lana Nikše 0000-0001-5755-1805, Pavao Mioč 0000-0001-5755-1805, Jakov Santini 0009-0003-1376-0957, Iva Tokić 0000-0002-7947-3577, Ivan Zeljković 0000-0002-4550-4056

KEYWORDS: Dyspnea; spontaneous; pneumomediastinum; pneumopericardium

INTRODUCTION/OBJECTIVES: Spontaneous pneumomediastinum (SPM) is a rare condition in young adults, usually affecting young healthy males with underlying pulmonary disease, which can be extremely rarely complicated with pneumopericardium (SPP).
CASE PRESENTATION: A 22-year-old female was admitted to the emergency department (ED) with an acute onset of dyspnea and severe pain in the left side of the neck, chest and left arm, especially when leaning forward. On admission, she was afebrile and physical examination revealed symmetric, clear breath sounds and almost inaudible heart beats without Hamman's sign. An arterial blood gas analysis revealed mild hypocapnia. An X-ray showed pneumomediastinum, and subsequent chest CT (computerized tomography) scan confirmed extensive pneumomediastinum with pneumopericardium up to 5 mm in thickness. She did not have any pre-existing pulmonary disease or other predisposing risk factors (heavy lifting, exercise, trauma). A chest CT scan showed no signs of pulmonary bullae, or any structural abnormalities in the bronchi or the esophagus. Echocardiography was done using subxiphoid projection, which was the only one revealing the heart, and showed no pathology and no hemodynamic repercussions from the SPP. The therapy was absolute bed rest, peroral analgesia and oxygen supply (4 L/min). During hospitalization, she was afebrile and no antibiotics were prescribed. The follow-up chest X-ray showed a complete resolution of pneumomediastinum and pneumopericardium and she was symptom free.
CONCLUSION: When evaluating a young adult who presents with dyspnea, it is important for emergency physicians to interpret the x-rays carefully in order to look for pathology like SPM if there is reasonable clinical doubt.