DIAGNOSIS AND MANAGEMENT OF INFECTIOUS COMPLICATIONS IN CHRONIC LYMPHOCYTIC LEUKEMIA

Larisa Musteata[1], Dana Coman[1], Vasile Musteata[1,2]

[1] State University of Medicine and Pharmacy "N. Testemitanu", [2] Institute of Oncology, Moldova

Background

Chronic lymphocytic leukemia (CLL) is an actual issue of oncology due to the increase of morbidity, frequent and therapy-resistant relapses, the development of infectious complications, commonly leading to the unfavorable prognosis.

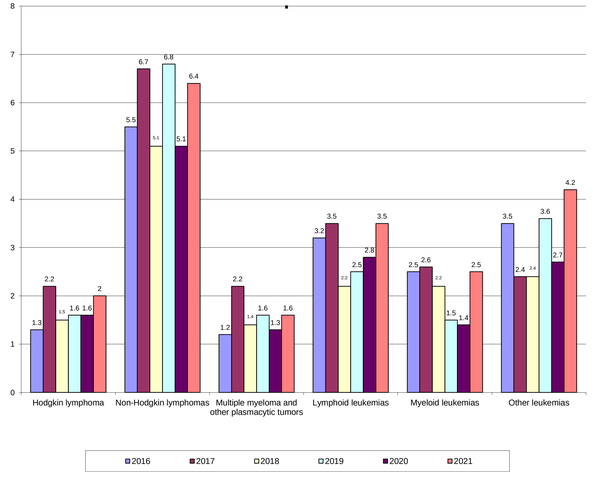


Figure 1. Incidence of hematological malignancies in the Republic of Moldova per 100000 of population

Objective

The identification of diagnostic features and management outcomes of infectious complications in CLL.

Materials & Methods

We realized the case-control study of 82 CLL patients, who were treated at the Institute of Oncology from Moldova between 2000–2021. The diagnosis was proved according to the IWCLL criteria based on the complete blood count with the detection of lymphocytosis ≥ 5x10^9/l, bone marrow aspiration with lymphocytic infiltration ≥30% and immunophenotyping. The study was related to the out-patient and hospitalized care. The overall survival (OS) estimated the long-term results.

Summary & Discussion

The study included CLL patients of 45–86 years old (median age 66.2 years). There were 47 men (57.3%), women – 35 (42.7%). The study of the age structure revealed the predominance of patients of 60–79 years old. Twenty-two (40.8%) stage A patients experienced the CLL transformation into stage B. Transformation into stage C was observed in 10 (35.7%) patients. The respiratory bacterial infections turned out to be frequently diagnosed (29 patients, or 80.6%): acute pneumonia in 10 (27.8%), acute bronchitis in 7 (19.4%), relapse of chronic bronchitis in 11 (30.6%), and tuberculosis in 1 (2.8%) patient. Viral herpetic complications were diagnosed in 2 (5.6%) cases. Infectious complications of the other systems were detected in 5 (13.8%) patients: nephro-urinary infections – in 3 (8.2%), acute otitis – in 2 (5.6%). Death occurred over a period of 3–19 years in 16 (19.5%) patients: due to infectious complications – in 6 (37.5%), as a result of CLL progression – 5 (31.3%), due to the secondary tumors – in 4 (25 .0%) and acute cerebrovascular accident – in one (6.2%). The 3- and 5-year OS was 100% and 95.7% in patients with stage A, 84.8% and 55.4% – in stage B, respectively.

Conclusions

Infectious complications are frequent manifestations and cause of death in CLL, especially in stage B disease.

References

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Corresponding author: Larisa Musteata, MD, PhD; larisa.musteata@usmf.md