



Diagnosis and Treatment Options in Low-Risk Chronic Lymphocytic Leukemia

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Background

In the structure of leukemias morbidity, chronic lymphocytic leukemia (CLL) ranks second after acute leukemias. It is an actual issue of hemato-oncology due to the increase in morbidity rates, frequent relapses, autoimmune and infectious complications.

Objective

The main objective of the study was to evaluate the diagnostic features, short- and long-term results of treatment in low-risk CLL.

Materials & Methods

The study enrolled 82 patients with low-risk CLL aged at 45-86 years (median age - 66.2 years), treated at the Institute of Oncology in 2000-2020. The diagnosis was asserted by immunophenotyping and detection of lymphocytosis in the blood smear and bone marrow aspirates. The study was related to the outpatient and in-patient care. The response to treatment was assessed by the survival and progression rates. Single-agent chemotherapy with chlorambucil was performed in older patients, with concomitant pathology. COP and CHOP chemotherapy $\pm$ Rituximab was performed mostly in stage C.

Summary & Discussion

There were registered commonly males (57.3%) and age groups of 60-79 years. According to Binet classification, 54 (65.9%) patients were revealed in stage A, and 28 (34.1%) in stage B. Transformation into stage B occurred in 22 (40.8%) patients with stage A in the period of 1-4 years. The CLL progression into stage C was found in 10 (37.7%) patients with stage B.

Peripheral lymphadenopathy was revealed in 27 (96.4%) patients, splenomegaly in 22 (78.6%), hepatomegaly in 13 (46.4%). Infectious complications were detected in 11 (20.4%) cases. Autoimmune hemolytic anemia was diagnosed in 9 (32.1%) stage B patients. Partial responses were achieved for 4-6 months after chlorambucil chemotherapy. 16 (19.5%) patients were followed up to fatal outcomes within 3-19 years, including 5 (31.3%) due to the CLL progression and 5 (31.2%) due to secondary tumors. The overall one-, 3- and 5-year survival was 98.0%, 91.2% and 77.3%, respectively. The one-, 3- and 5-year survival in stage A patients was equal to 100%, 100% and 95.7%; in stage B - 96.4%, 84.8% and 55.4%, correspondingly.

Table 1. Stage-depending survival of CLL patients

Binet stage	Number of patients	Survival, %		
		1-year	3-year	5-year
A	54	100	100	95,7
B	28	96,4	84,8	55,4
Overall	82	98,0	91,2	77,3

Conclusions

CLL was diagnosed commonly in males, aged 60-79 years and in stage A. The infectious complications were registered in 43.9% of cases. The survival rates depended on a clinical stage, and accounted 98.0% at one year and 77.3% at 5 years.

References

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