Coronavirus Disease Mortality and Outcome in Macedonian Patients with Chronic Lymphocytic Leukemia: Single-Center Experience

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CLL-224

Abstract

Context:

Patients with chronic lymphocytic leukemia (CLL) may be more predisposed to coronavirus disease 2019 (COVID-19) due to age, the nature of the disease, and treatment-related immunosuppression(1).

Objective:
The aim of the study was to assess risk factors of the outcome and course of COVID-19 for CLL patients in Macedonia.

Design:
Retrospective study of patients with CLL and COVID-19 infection in the period of time from the beginning of the pandemic to March 2022.

Materials & Methods

Setting:
Individual patient data from 55 CLL patients with COVID-19 infection were analyzed. The risk factors of COVID-19 disease severity and outcomes were investigated.

Interventions:
The outcome was the analysis of patients with COVID-19 infection in line with host risk factors and biological heterogeneity of the disease with previous therapy for CLL.

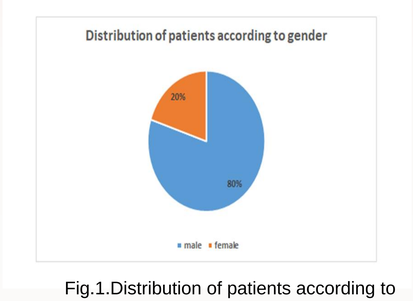


Fig.1.Distribution of patients according to gender

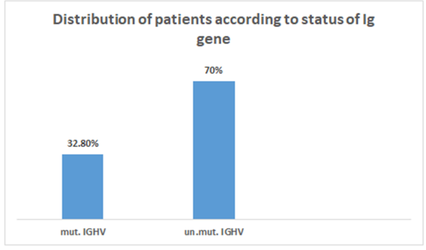


Fig.2.Distribution of patients according to Ig gene status

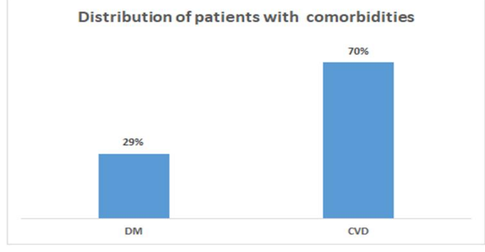


Fig.3.Distribution of patients according to comorbidities

Results:

Our evaluation has shown that 80% of patients were male and 20% were female(fig.1). The average age was 65 years. The average CIRS score was 2 and BMI was 23.6. Most of the patients (67.2%) have unmutated Ig genes(fig.2). Ninety-one percent (91%) from that subgroup of patients have a severe form of COVID-19, 82% of patients were previously treated with chemotherapy, and 48% had a fatal outcome.

Conclusions:

CLL-directed treatment and unmutated Ig genes were significant risk factors for survival. Untreated patients and patients with mutated IGHV had a better chance of survival than those on treatment or who were recently treated.

References
1, COVID-19 severity and mortality in patients with CLL: an update of the international ERIC and Campus CLL study. Leukemia (2021) 35:3444–3454;
https://doi.org/10.1038/s41375-021-01450-8