

Abstract

Background: When cancer patients are undergoing chemotherapy, they may be at a higher risk for severe outcomes such as death when infected with Covid-19. Therefore, examining clinical and laboratory findings in cancer patients with Covid-19 is of great importance.

Aim: This study was conducted to determine clinical and laboratory findings in hospitalized patients with solid organ tumors affected by Covid-19 at Imam Khomeini Hospital in Ardabil.

Materials and Methods: The present study is a descriptive cross-sectional study conducted retrospectively on 40 patients with solid organ tumors who were infected with Covid-19 and hospitalized at Imam Khomeini Hospital in Ardabil. The necessary information was extracted from the patients' medical records by the researcher-made checklist through reviewing the hospital's medical records unit. Then, qualitative variables were reported as frequencies (percentages) and quantitative variables as means (standard deviations).

Results: Among the 40 patients, 70% were male. 47.5% of the patients had metastatic tumors, and 30% had non-metastatic tumors and 27.5% had an uncertain status. 47.5% had a history of cancer surgery, and 20% had a history of radiotherapy. Additionally, 55% of the patients were discharged from the hospital with relative improvement, while 32.5% of the patients passed away. The status of 12.5% of patients was unclear. Among the clinical symptoms of the patients, the most common signs were cough at 42.5%, fatigue at 37%, and dyspnea at 35%. The least common symptoms were related to phlegm, bloody sputum each at 2.5%, and headache and anosmia each at 5%. In the examined patients, the levels of urea, AST, ALT, ALK, PMN, ferritin, lymphocytes, ESR, PTT, LDH were higher than normal levels. On the other hand, the levels of calcium and hemoglobin were lower than normal levels. Also, the results showed that in the non-fatigue group, the most common symptoms are fatigue (52.4%) and in the fat group, dyspnea (53.8%), but this difference was not significant. There was a significant difference in the level of alertness in both fatal and non-fatal groups ($p=0.021$).

Conclusion: The results of this study indicated that the mortality rate in patients with solid organ tumors was high. Cancer patients are at a higher risk due to specific conditions and baseline abnormalities in blood counts and inflammatory markers. This may lead to different effects in contracting Covid-19 compared to non-cancer Covid-19 patients.

Key words: Cancer, Covid 19, Clinical Characteristics, Laboratory characteristics