Case report: Our meta-analysis, suffers from several limitations. All the included studies are retrospective, the number of cancer patients is small, and many important data were not reported in these studies (cancer types, stages, and treatments).

Methodology: Several groups have published on outcomes of cancer patients infected with of the SARS-CoV-2 virus causing the COVID-19 infection. However, most of these reports are single-center studies with a limited number of patients. We performed a systematic review and meta-analysis to evaluate the impact of COVID-19 infection on cancer patients. We searched PubMed, Web of Science, and Scopus for studies that reported the risk of infection and complications of COVID-19 in cancer patients. The literature search retrieved 22 studies (1018 cancer patients).

Results: The analysis showed that the frequency of cancer among COVID-19 confirmed patients was 2.1% (95% CI: 1.3%, 3%) in the overall cohort. These patients had a mortality of 21.1% (95% CI: 14.7%, 27.6%), severe/critical disease rate of 45.4% (95% CI: 37.4%, 53.3%), ICU admission rate of 14.5% (95% CI: 8.5%, 20.4%), and mechanical ventilation rate of 11.7% (95% CI: 5.5%, 18%). The double-arm analysis showed that cancer patients had higher risk of mortality (OR = 3.23, 95% CI: 1.71, 6.13), severe/critical disease (OR = 3.91, 95% CI: 2.70, 5.67), ICU admission (OR = 3.10, 95% CI: 1.85, 5.17), and mechanical ventilation (OR = 4.86, 95% CI: 1.27, 18.65), compared to non-cancer patients. Further, cancer patients had significantly lower platelet levels and a significantly higher D-Dimer, C-reactive protein, and prothrombin time

Conclusion: cancer patients are at a higher risk of COVID-19 infection-related complications. Therefore, cancer patients need diligent preventive care measures and aggressive surveillance for earlier detection of COVID-19 infection.

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PLATELET DISEASES

OP 15

The factors that affect the results of the response to rituximab treatment in ITP patients

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Objective: ITP is an acquired thrombocytopenia caused by antibodies that develop against platelet antigens. The underlying mechanism is thought to be specific immunoglobulin G (IgG) autoantibodies produced by the patient\'s B cells, mostly formed against platelet membrane glycoproteins such as GPIIb/IIIa. Preventing serious bleeding is in the decision to start treatment. Patient with platelet count <30,000/microL or signs of severe bleeding (intracranial or gastrointestinal), platelet transfusion along with glucocorticoid and/or IVIG therapy should be started immediately. If there are still signs of bleeding or platelet count <20,000/microL following glucocorticoid-based treatments, three principal choices such as rituximab, splenectomy, TPO agonists can be used as a second-line therapy. The aim of our study is to determine the factors that affect the results of the response status to rituximab treatment in ITP patients.

Methodology: Twenty five patients with the diagnosis of ITP who were treated in Hematology Clinic at Ankara Numune Hospital, Ankara City Hospital and Şanlıurfa Mehmet Akif İnan Hospital Hematology Clinic. The dose of rituximab administered in patients is 375 mg/m^2 once a week for four consecutive weeks. Treatment response criteria are; those with a platelet >30,000 were defined as a response, and those with >100,000 as a complete response.

Results: Seventeen of the patients (68%) were female and 8 (32%) were male. Median age was 34 (18-71). All Patients who treated with Rituximab was received corticosteroid as a first line treatment. Twenty (80%) of the patients was responded to Methyl prednisolone (MP) treatment, 5 patients (20%) were resistant to MP treatment. Eleven patients (44%) had steroid dependent disease before Rituximab treatment. Thirteen (52%) of the patients were underwent splenectomy. Three patients (12%) received Eltrombopag treatment before Rituximab treatment. The response was observed in 20 of 25 patients who received Rituximab so overall response rate (ORR) is 80%. Complete Response (CR) was observed in 17 (68%) of the patients and partial response was in 3 (12%) of the patients. In patients with complete response, the median response time was on the 15th day (6–90 days). In patients with partial response, the median time was 12th day. After a median follow-up of 48 months (12–186), for 20 patients who were rensponsive to Rtiuximab, median duration of response was 15 months (2–68 months). In the follow-up period, clinical recurrence was detected in 12 (60%) of 20 patients, while permanent remission was achieved with Rituximab in 8 patients (40%). In patients with MP-dependent group, the Rituximab response rate is significantly higher than patients with non-dependent ($p = 0.027$). There was no difference in response to Rituximab treatment in splenectomized patients, those who received eltrombopag therapy before or whom have steroid resistant disease. In addition, the median time for Rituximab response in the MP dependent group is significantly higher than the MP resistant group (9.4 months vs. 17.4 months, $p = 0.006$).

Conclusion: Rituximab is a second line treatment for ITP patients especially whom are not suitable for splenecetomy. It should have more priority to TPO agonists regarding the success to obtain long-term remission.

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