Preventing Geriatric Oncology Patients from the Spread of COVID-19

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Approximately 55% of new cases and 70% of mortality from cancer occur in patients ≥65 years of age. The care of older patients constitutes an integral part of the everyday practice for an adult oncologist. Now it is known that COVID-19 infection has higher mortality in older patients and especially in those with chronic comorbidities. Cancer patients and especially old cancer patients create the most critical risk group in existing risk groups. In addition to aging, cancer itself and its treatments like chemotherapy, immunotherapy, and oncologic surgeries also weaken the immune system.

In a recent study from China, there were 18 patients with cancer history among 1590 COVID-19 cases. It amounts to 1% of the total patient number, which is higher than the incidence (0.29%) of cancer in the Chinese population. The study showed that patients with cancer are at increased risk for severe complications than the other patients (39% vs. 8%). Among these 18 cancer patients, six were older than 65 years, and all of them developed severe respiratory complications and required treatment in the intensive care unit, which is a very concerning outcome for geriatric oncology patients. Additionally, the period until the development of serious complications was shorter in cancer patients (13 days vs. 43 days), and they had more severe baseline Thorax Computer Tomography (CT) manifestations compared to patients without cancer (94% vs. 71%). The highest risk for severe events is cancer history, and older age was the only risk factor among all cancer patients. Another study from China supported these findings and showed the association between infection risk and a history of antitumor therapies within the past 14 days.

Therefore, it is imperative to protect elderly cancer patients from this pandemic. Barrier measures should be applied very strictly like wearing a mask, frequent washing of hands, social isolation, among others. Additionally, influenza and the pneumococcal vaccine should be recommended to all such patients. Since most of the COVID-19 infections are nosocomial, hospital admissions should be minimized. Further, the use of telemedicine should be encouraged to assess possible symptoms of patients before the scheduled chemotherapy or outpatient visit. The patients showing any COVID-19 symptoms should be redirected to COVID-19 clinics, which is necessary for sterile oncology clinics and helpful for early identification of infection in older cancer patients. Also, symptoms related to cancer should be evaluated via telemedicine and phone calls to postpone routine follow-up visits and encourage the patients to stay at home safely.
On the other hand, while trying to protect older patients from infection, it should be ensured that they should not die from cancer on the pretext of not receiving treatment on time. Although some authorities recommend postponing all curative and palliative treatments for patients older than 60 years, on the recommendations of the Turkish Medical Oncology Society, we prefer to continue the use of neoadjuvant and adjuvant therapies in curative setting for patients with good performance status.

Adapting treatment regimens is an option, if possible, with favoring oral drugs or hormone-directed therapies, shorter administration times or larger intervals between chemotherapy/immunotherapy or radiotherapy doses. In metastatic patients, intravenous regimens could be changed to oral/subcutaneous therapies. However, if there is no substitute, the risk-benefit balance should be assessed and therapeutic breaks should be strongly considered for high-risk patients.

Prophylactic granulocyte colony-stimulating factor should be prescribed to avoid neutropenic situations, which is a common side effect of systemic cancer therapies and makes patients susceptible to infections.

As a result, it should be kept in mind that elderly cancer patients, especially those who are receiving active treatment like surgery, chemotherapy, radiotherapy or immunotherapy are at the highest risk during this COVID-19 outbreak. As clinicians, we have a critical role in finding the way for both to protect the patients from infection and ensure that they receive optimum treatment. There is a need for virtual multidisciplinary tumor boards, including geriatricians, to make case-based decisions for every single patient.

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**Authorship Contributions**

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