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MO33-1 Trends in chemotherapy at our hospital and department under the COVID-19 pandemic

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Background: The COVID-19 pandemic has had various effects on clinical practice. Anticancer chemotherapy is no exception. This time, we investigated the trends of chemotherapy in our hospital and department under the COVID-19 pandemic, and report the results to examine the effects of the COVID-19 pandemic.

Method: We count the number of outpatient chemotherapy and the number of hospitalizations in which chemotherapy was performed in our hospital and our department from January to August 2020. And the impact of the COVID-19 pandemic is investigated from changes in the number of patients and comparison with the same period of the previous year.

Results: During the same period, outpatient chemotherapy was given to 1396 patients a total of 9647 times, and to 242 patients a total of 1237 times in our department. Compared to the same period of the previous year, it decreased by about 13% in the entire hospital and about 6% in our department. In addition, when compared monthly, there was no change from the previous year until January, and the downward trend began in February and reached the lowest number in May. After that, it showed a recovery trend, and although it recovered significantly in July, it did not recover to the previous year's level during the observation period. In addition, when the tendency within our department was investigated, a significant decrease was observed in the solid cancer group, but almost no change was observed in the lymphoma group.

Conclusion: Outpatient chemotherapy was suppressed by the COVID-19 pandemic, but some treatment was given. In addition, although chemotherapy for the purpose of suppressing progression and alleviating symptoms decreased, it was speculated that chemotherapy for the purpose of curative treatment was performed as usual.

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MO33-3 Clinical characteristics and outcomes of cancer patients with COVID-19: A study in a single center in the Philippines

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Background: The COVID-19 pandemic is a rapidly evolving crisis worldwide. Cancer patients represent a highly vulnerable group during this pandemic and are facing the most severe and critical consequences of this outbreak. This study aims to contribute to our existing knowledge on the clinical impact of this novel disease on cancer patients. In our local setting, there is currently no known published data on this topic.

Methods: We conducted a retrospective, single center, cohort study of 19 solid cancer patients with COVID-19 admitted in a tertiary hospital in Quezon City, Philippines from March to May 2020. Clinical characteristics, laboratory data and treatment histories were compared between patients with mild and severe outcomes.

Results: Median age was 69 (range 37-81), 63.2% were elderly (≥ 60 years), and 57.8% were female. The most common malignancies were breast (26.3%), lung (21%), and genitourinary cancer (10.5%), and majority had early stage cancer (63.2%). Fifteen patients (78.9%) had recent anti-cancer treatment within 2 weeks prior to admission, most commonly, cytotoxic (21.05%) and targeted therapy (21.05%). Among patients who developed severe outcomes, most had lung cancer, stage IV disease, recent anti-cancer treatment, and higher levels of inflammatory markers. Having nosocomial-acquired infection was associated with severe outcomes ($p=0.004$).

Conclusions: Patients with cancer have a high probability of severe illness and mortality when diagnosed with COVID-19. We found that those with recent anti-cancer treatment, particularly chemotherapy, have higher rates of severe complications; and that hospital-acquired infection is common among cancer patients and is associated with severe illness. Our study is limited by its small population, though our findings are consistent with other published studies. Cancer patients require urgent and special attention during the pandemic, especially those who are receiving anti-cancer treatment.

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MO33-5 The impact of chemotherapy for cancer patients with COVID-19 on severity and mortality outcomes: A meta-analysis

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Background: Until now, the number of death cases from coronavirus disease 2019 (COVID-19) is still increasing. Several meta-analyses have shown that cancer is associated with poor outcomes from COVID-19. However, the decision of whether to continue or not cancer treatment in the current pandemic still give a dilemma. On one side, chemotherapy is meant to halt the progression of cancer and give a better prognosis, but on the other side, the compromised immune response caused by chemotherapy can increase the risk of infection and may worsen the course of infection. The results from various studies regarding the effects of recent cancer treatment, including chemotherapy on the COVID-19 course is still conflicting. This study aims to give clear evidence regarding the impact of chemotherapy treatment in cancer patients with COVID-19 infection on the severity and mortality outcomes.

Methods: A systematic review was performed according to PRISMA guidelines. A literature search was conducted by two independent reviewers on all studies that included chemotherapy treatment in cancer patients who have COVID-19 infection using PubMed and PubMed Central databases. The outcome of interest included severe outcome and mortality rate. Statistical analysis was carried out using Review Manager 5.4 software.

Results: A total of 3442 patients from 11 studies were included in our meta-analysis. Our meta-analysis showed that chemotherapy treatment in cancer patients with COVID-19 infection is not associated with severe outcome of COVID-19 [OR 1.04 (95% CI 0.82 - 1.31), $p = 0.77$, $I^2 = 17\%$, fixed-effect modelling] and mortality from COVID-19 infections [OR 1.18 (95% CI 0.81 - 1.72), $p = 0.38$, $I^2 = 41\%$, random-effect modelling].

Conclusion: Chemotherapy treatment on cancer patients with COVID-19 infections does not alter the severity and mortality outcomes from COVID-19. Physicians should continue the chemotherapy treatment for cancer patients despite the COVID-19 infection status.

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MO33-7 Preparedness for COVID-19 pandemic and impact on medical oncology for breast cancer

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Background: An emergency framework was set to confront the first wave COVID-19 pandemic at the medical oncology division for breast cancer at the Cancer Institute Hospital of JFCR, Tokyo, in March 2020. Medical therapy was classified into two phases in our guideline. In the initial phase, workload or patients' visit was to be reduced without impairing disease control and survival. In the successive phase under restriction of medical resources, only therapies with higher priority and alternate therapies were to be practiced. Whereas no significant effect on medical practice was observed during first wave pandemic, actual impact was evaluated in this study.

Methods: Among patients in our division from April to May 2020, cases of treatment change, postponement of treatment introduction, treatment interruption, long-term prescription, telephone consultation, postponement of visit, reference to other hospital, and COVID-19 diagnosis were retrospectively searched from medical records.

Results: There were estimated 984 patients, 389 perioperative and 595 metastatic, of whom 119(12%) were affected by COVID-19. The breakdown is 7 cases of treatment changes, 7 cases of postponements of introduction, 20 cases of interruptions, 12 cases of long-term prescriptions of oral chemotherapy and molecular targeted therapy, 36 cases of prescriptions by telephone consultation, 94 cases of postponements of visit, 3 cases of reference to other hospital, and 4 cases of fever for which COVID-19 infection could not be denied.

Conclusion: 12% of patients in the division of medical oncology at the breast center changed their treatment or schedule of visit. Treatment change that could affect breast cancer survival were 2 cases of cancellation of adjuvant chemotherapy. The effect might have been minimized by formulation of a COVID-19 guideline prior to the pandemic.

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