Results

Fifteen patients were included in this study. Four patients were examined twice, giving rise to a total of 19 tests for analysis. Of these, 14 cases had early breast cancer and five had advanced or metastatic breast cancer. The mean age was 63.8 years (range=34-83 years). Seven cases underwent surgery, 10 received chemotherapy, and two were admitted into hospital as an emergency. Of the patients given chemotherapy, three received adriamycin and cyclophosphamide (AC) or dose dense (dd) AC, three received weekly paclitaxel (wPTX), three received bevacizumab (Bev) + PTX, and one received trastuzumab emtansine (T-DM1) (Table I). Three cases given AC or ddAC also received pegylated granulocyte colony stimulating factor (PEG-GCSF) on day 3.

Mean body temperature was 36.6°C (range=35.7-37.4°C). Sixteen cases were indicated for screening, and 3 were suspected of having COVID-19. Eighteen cases were tested by PCR, and two by an antigen test. Fourteen cases had no symptoms, two cases had low grade fever (37.4°C), two had dysgeusia, and one had respiratory discomfort and cough. However, all cases were diagnosed as COVID-19 negative (Table II).

Discussion

The main purpose when SARS-CoV-2 screening was started, was to prevent hospital spread of COVID-19 infection. Fortunately, no spread of infection has occurred in our hospital to date. However, as practising oncologists, we were concerned about the impact of COVID-19 on cancer treatment. A previous report regarding cancer care during the pandemic recommended that anticancer drug treatment should be suspended if a patient is found to be SARS-CoV-2-positive (7). Furthermore, the authors of that report recommended that a request for a review to start or continue treatment of SARS-CoV-2-positive patients should be considered in the context of medical necessity. In addition, a significantly greater number of sentinel lymph nodes positive for cancer was identified during the COVID-19 outbreak (8, 9). Our screening results have allowed us to avoid suspension of treatment as none of our patients was positive. We suggest that screening in this context can help to ensure that breast cancer treatment can proceed as normal wherever possible, even during the pandemic.

During this study, we noticed that symptoms of COVID-19 infection, metastatic breast cancer and the side effects of chemotherapy were similar. Physicians must therefore be rigorous during diagnosis to ensure that truly SARS-CoV-2-positive patients are identified and managed appropriately. Dysgeusia and respiratory symptoms can occur in both breast cancer and COVID, thus doctors must make diagnoses carefully.

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A limitation of this study is that it took place at only one institute, where less than 20 cases were analysed. In addition, there were no SARS-CoV-2-positive breast cancer patients that could be used as a control case group. Increasing the study size and/or including SARS-CoV-2-positive patients may provide more insights into this issue.

In our country and our prefecture, it appears that complete control of COVID-19 is still a long way off. Mass vaccination should facilitate the transition out of the pandemic and allow us to live with the virus. Until then, great attention must be paid to the management of breast cancer and COVID, thus doctors must make diagnoses carefully.