

Effect of COVID -19 pandemic on surgical care of breast cancer in Kerala; A single-centre cohort study.

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BACKGROUND- the first case of coronavirus disease 2019 (COVID-19) in India was reported on January 30, 2020, from Kerala. On March 21, 2020 lockdown was implemented in India. During this period, routine health care around the state was interrupted. Our study's main aim was to evaluate the effect of Covid-19 pandemic on surgical care for patients with breast cancer in a cancer centre in Kerala, India.

METHODS- A single-centre retrospective study was conducted to evaluate the effect of Covid-19 on surgical care for patients with breast cancer before and after the pandemic. The data were collected from the hospital's electronic medical records from March 2019- December 2019 (before the pandemic) and March 2020- December 2020 (after the pandemic). The primary endpoint was the number of surgical procedure performed, tumour characteristics at presentation and time duration between diagnosis and treatment. A pre-surgical evaluation and screening for SARS COV-2 with RT-PCR were also done to rule out asymptomatic infection.

RESULTS

274 patients underwent surgery before the Covid-19 pandemic (group 1) and 252 after the pandemic (group 2). The median age was 54 and 53 in the group 1 group 2, respectively. The duration of symptoms in group 1 was 6.3 weeks and 8.1 in group 2. The clinical size of the tumour in group 1 was 2.86 cms and 2.94 cms in group 2. The tumour size >5 cm was observed in 23 (8.4%) patients in group 1 and 25 (9.9%) patients in group 2. The majority tumour size was <5cm (91.6% in group 1 versus 91.9% in group 2). Duration of hospital stay was 3.88 days in group 1 and 4.04 in group 2. The time taken from the diagnosis to treatment was 21.35 days in group 1 and 31.43 days in group 2, which was statistically significant in group 2 ($p=0.005$). There was no significant difference in the duration of symptoms, tumour size, and hospital stay among groups 1 and 2. Three patients tested positive for Covid-19 infection during the pre-surgical evaluation. As per protocol, the patients were isolated, and after they tested negative, they were taken up for surgery. After hospital discharge, none of them had any post-operative complications. No COVID-19 infection was detected among patients or health care workers.

CONCLUSION- Even though the pandemic and lockdown affected routine life, the healthcare system was actively functioning in the state. This study shows no significant difference in the surgical care of patients with breast cancer before and after Covid-19. With proper clinical triaging and universal screening, the continuation of cancer care is possible even during this COVID-19 pandemic.

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