## Unmet needs of breast cancer rehabilitation services in COVID-19 era

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Introduction: COVID-19 has critical timelines, including the pandemic announcement published by WHO on March 11, 2020, and the subsequent development of effective vaccines. Health care services for breast cancer, which is the most common cancer in women, have also been affected by the pandemic. Patients with problems such as fatigue, shoulder dysfunction, lymphedema, axillary web syndrome, peripheral neuropathic pain, osteoporosis and arthralgias due to aromatase inhibitors after breast cancer treatment are referred to physical medicine and rehabilitation clinics. The aim of this study is to evaluate breast cancer and lymphedema rehabilitation services during the COVID-19 pandemic period and to compare them with pre-pandemic data.

Method: The study included 50 female patients (mean age: 54.10 ±10.18 years) diagnosed with unilateral breast cancer out of 63 patients referred to Medicana International Ankara Hospital Oncological Rehabilitation and Lymphedema unit from Breast Surgery, Medical Oncology and Radiation Oncology clinics. Demographic data of female patients included in the study, type of surgery; Modified radical mastectomy (MRM), breast conserving surgery (BCS), chemotherapy (CT), radiotherapy (RT) status, Body Mass Index (BMI), postoperative (elapsed time) month (after surgery), intact side arm volume, operated side arm volume, difference volume, % of volume difference, removed axillary lymph node and positive lymph node count values were evaluated. At the same time, lymphedema status, plastic surgery to the breast, presence of axillary web syndrome, and whether they received complex decongestive therapy (CDT) were recorded. At the same time, patients diagnosed as 197.2 in the Enzyme HBYS system were analysed as the number of patients and the number of visits for 2 years before the pandemic (11.3.2018-11.3.2020) and 2 years after the pandemic (12.3.2020-12.3.2022) for a total of 4 years.

Results: When 50 patients admitted to the oncological rehabilitation and lymphedema department during the pandemic were evaluated, a history of MRM was present in 29 (58%) patients. While there was a history of CT in 22 patients (44%), 27 patients (54%) had a history of RT. Lymphedema due to breast cancer (MBL) was detected in 24 patients (48%). While only 5 patients (10%) were of normal weight, 90% of the patients were overweight (58%) and obese (32%). A total of 3 patients (6%) underwent mammoplasty. In 4 patients (8%), there was limitation in shoulder movements due to axillary web syndrome. 24 patients (48%) were accepted to the CDT program. There was no difference between the data of the patients who received and did not receive CDT (p>0.05).

**Conclusion:** The COVID-19 pandemic has affected breast cancer rehabilitation services in different dimensions. The number of patients with lymphedema due to inactivity and weight gain, possibly caused by the lock-down process and legal restrictions, increased during the pandemic. Although the number of patients with a diagnosis of 197.2 and the number of visits increased during the pandemic period, only one of every 2 patients was admitted to the rehabilitation program.