## Evaluation of clinical permanent lymphedema in Modified Lymphatic Dissection of axillary in breast cancer

## Abstract

**Background**: lymphedema refers to one of the side effects of breast cancer treatment, being of paramount importance for both patients and physicians. A wide variation in the prevalence rate is revealed by various studies, depending on the extent of breast and axillary surgery, besides the application of radiation therapy.

**Aim:** This study was conducted with the aim of investigating the frequency of stable clinical lymphedema in modified axillary lymph node dissection and its relationship with some factors.

Materials and Methods: This cross-sectional study investigated the patients referring to Imam Khomeini Hospital in Ardabil between 2016 and 2021, diagnosed with breast cancer, and undergone surgery. Individual patient variables including the presence or absence of lymphedema, age, height, weight, tumor location, tumor size, presence or absence of metastasis, tumor pathology type, presence or absence of chemotherapy, and type of surgery were assessed in order to specify the frequency and risk factors of developing lymphedema.

**Conclusion**: In the present study, we examined the clinically stable lymphedema in modified radical mastectomy with axillary lymph node dissection in breast cancer in 140 patients, 31 of whom) experienced clinically stable lymphedema, recurrence was observed in none of the patients, and metastasis was seen in 18 patients.

**Result**: The modified radical mastectomy with axillary lymph node dissection method had a lower rate of clinically stable lymphedema and the patients' quality of life (QoL) improved in this method compared to the non-modified radical mastectomy with axillary lymph node dissection. According to the performed study and comparing it with previous studies, the modified radical mastectomy with axillary lymph node dissection method did not increase the rate of recurrence of the disease, while non-modified radical mastectomy with axillary lymph node dissection method was also associated with recurrence of the disease.

**Keywords:** Breast cancer, primary lymphedema, secondary lymphedema, modified lymphatic dissection