

# RETROSPECTIVE STUDY OF THE IMPACT OF NEOADJUVANT THERAPY ON SURGICAL DECISIONS IN PATIENTS WITH BREAST CANCER

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## Introduction

Breast cancer is the universal most frequently diagnosed cancer in women. Over time, evolutions in understanding the biological behavior of breast cancer as a disease has made a paradigm shift in its management from radical to more conservative treatment strategies with comparable oncological outcome, overall survival yet with better quality of life, thus, making cancer breast - when early detected - less concerning type of cancer, especially that high rates of cure is being achieved.

A multidisciplinary team approach is needed for ideal management of breast cancer aiming primarily at reduction in breast cancer mortality as well as several cosmetic and oncological advantages. Breast conservation surgery is the standard of care surgical procedure for early breast cancer patients. Neoadjuvant therapy refers to the systemic treatment of breast cancer prior to definitive surgical therapy. While all systemic therapy given for non-metastatic invasive breast cancer intended to reduce risk of distant recurrence, the drive of administering it prior to surgery is to downstage the tumor and to have information regarding treatment response.

## Aim of the work

The aim of this study was to highlight the impact of neoadjuvant therapy on the decision-making regarding breast surgery and to assess rate of breast-conserving surgery instead of mastectomy in the included breast cancer patients.

## Patients and Methods

Retrospective study was obtained from 75 female patients with non-metastatic breast cancer who are admitted in the Alexandria Main University hospital, surgical oncology unit.

## Results

Relation between pre neoadjuvant breast decision and operation  
Mastectomy was avoided in twenty two patients after neoadjuvant treatment and this is representing a clear change in decision based on our intervention.  
Due to non-routine clipping of mass, some patients (fifteen patients) eligible for BCS before neoadjuvant therapy did mastectomy.

Table : Relation between pre neoadjuvant breast decision and operation (n = 75)

Operation	Preneoadjuvant breast decision				c <sup>2</sup>	P
	BCS (n = 44)		Mastectomy (n = 31)			
	No.	%	No.	%		
BCS	29	65.9	22	71.0	0.214	0.644
Mastectomy	15	34.1	9	29.0		

χ<sup>2</sup>: Chi square test  
p: p value for comparing between the studied groups

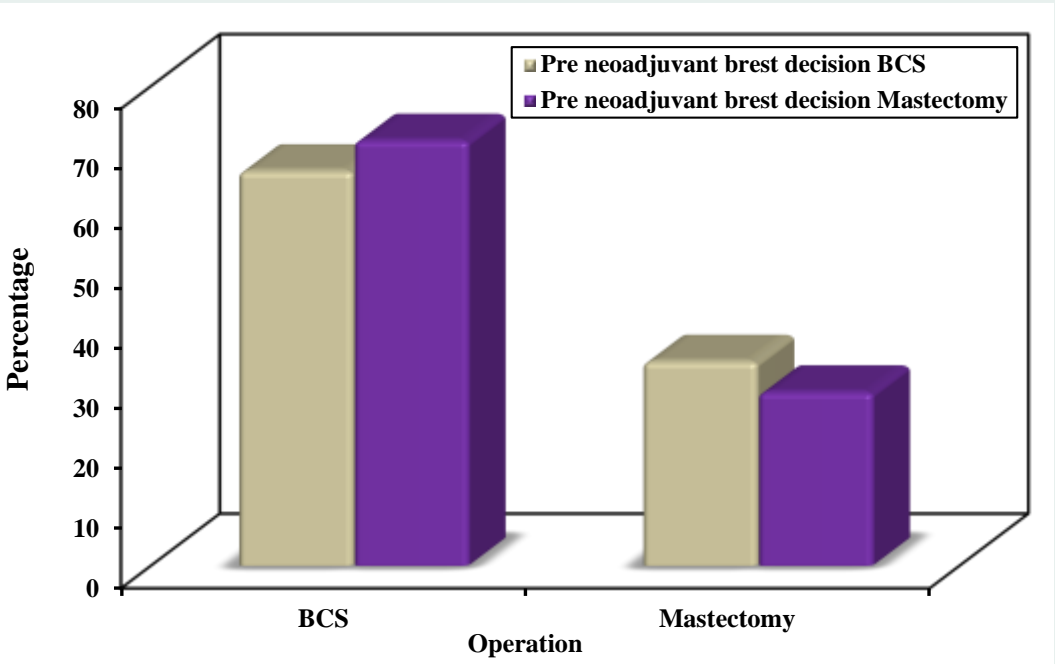


Figure: Relation between pre neoadjuvant breast decision and operation (n = 75)

## Conclusion

- Neoadjuvant therapy now becomes a surgical tool in management of breast cancer. A documented benefit of neoadjuvant therapy is downstaging of the disease allowing for BCS in approximately one-quarter of patients initially planned for mastectomy.