

# Psychosocial factors affecting breast sensitivity in breast hypertrophy

## INTRODUCTION

- Breast reduction surgery, or reduction mammoplasty, is a common procedure aimed at alleviating physical discomfort and improving quality of life.
- Psychosocial and anthropometric factors are stipulated to play an important role in breast sensation and overall patient satisfaction with the surgery.

## OBJECTIVES

- This study aims to investigate the relation between selected psychosocial and anthropometric factors and increased breast sensitivity following breast reduction surgery.

## MATERIALS & METHODS

- **Participants:** 32 women undergoing reduction mammoplasty (RM) (age 18-65), and 54 women not seeking the surgery (control group, GM) (age 18-65).
- **Procedure:** data collected from patients of University Clinical Barlicki Hospital undergoing reduction mammoplasty and patients of women's health center KOMED not seeking the surgery.
- **Measures:** validated questionnaires Depression, Anxiety and Stress Scale (DASS 21), Rosenberg self-esteem scale (RM before and at 1-year follow-up), BREAST-Q, age, BMI, parity status, suprasternal notch-nipple distance, nipple-areola complex diameter (NAC), algometer NAC sensation examination, VAS pain assessment 12, 24 hours, 5, 7 and 14 days after the surgery.

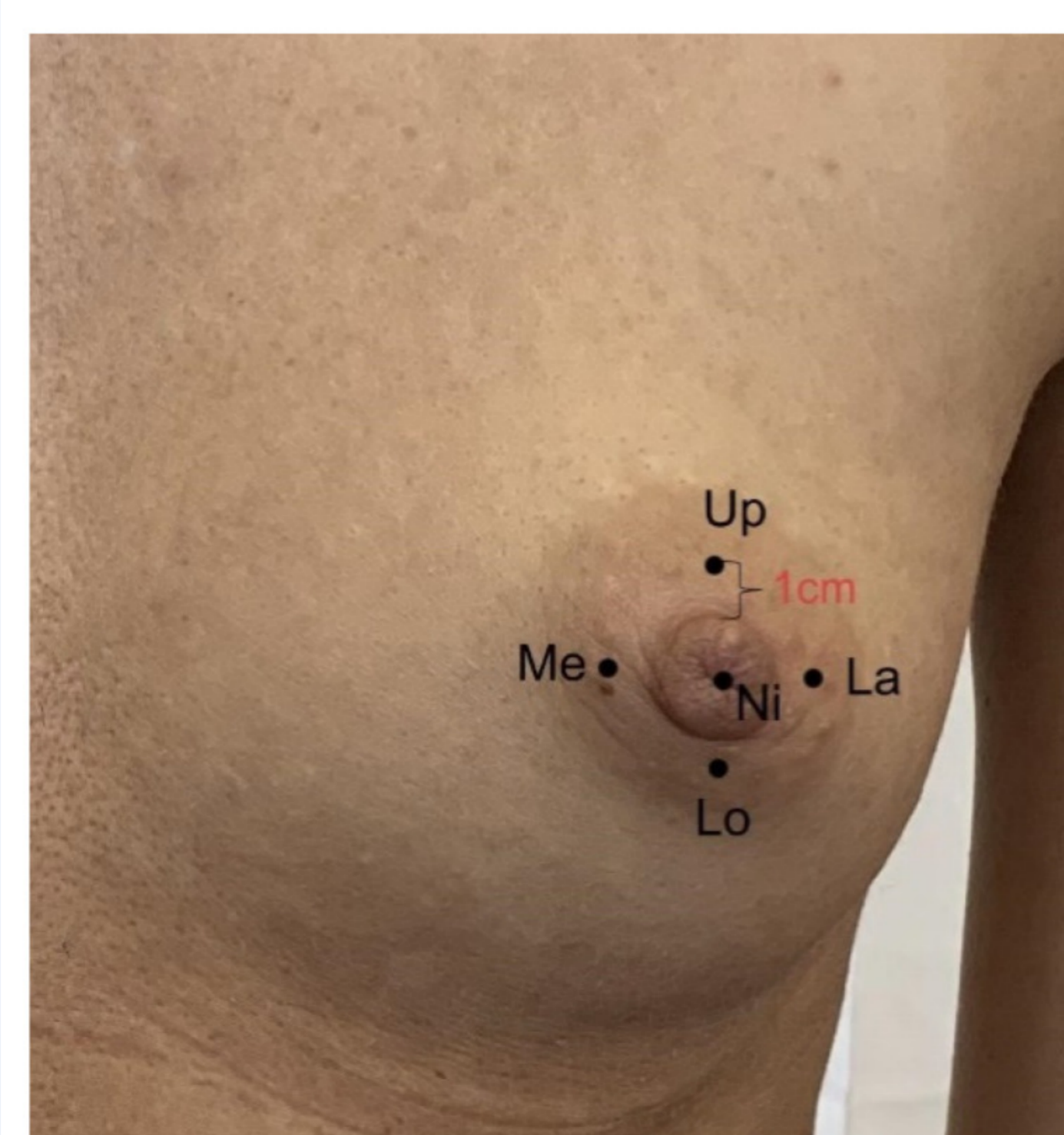


Fig. 1. Five nipple-areola areas measured for sensation thresholds with algometer. The measured points 1 cm from the nipple margin were labeled: Ni = nipple, Up = upper, Lo = lower, Me = medial, La = lateral.

## RESULTS

Table 1. Age characteristics of reduction mammoplasty and control groups.

Characteristics	Age (years)	n	%
RM	18-40	9	28
	41-60	21	66
	61-80	2	6
CG	18-40	27	50
	41-60	20	37
	61-80	7	13

Table 2. NAC sensation in RM and CG groups.

side of NAC	median	mean	SD
nipple	746.44	703.53	0.59
upper	1452.78	1390.82	0.67
medial	1328.12	1411.10	0.74
lower	1365.32	1332.12	0.60
lateral	1552.89	1491.34	0.82

side of NAC	median	mean	SD
nipple	981.19	883.37	0.82
upper	1932.90	1890.06	0.67
medial	1527.21	1510.78	0.36
lower	1711.89	1632.74	0.72
lateral	1652.78	1491.76	0.47

p < 0.0001

Table 3. Prevalence of depression, anxiety and stress in reduction mammoplasty and control groups.

Clinical variable	Depression N (%)	Anxiety N (%)	Stress N (%)
RM	6 (19 %)	17 (31 %)	30 (94 %)
CG	15 (28 %)	22 (41 %)	12 (22 %)

Table 4. DASS 21 scores comparison in reduction mammoplasty. and control groups.

Variable	Mean Rank RM	Mean Rank CG	p-value
Depression	86.69	66.4	<b>0.034</b>
Anxiety	84	78.48	0.557
Stress	88.53	58.1	0.469

## CONCLUSIONS

- Psychosocial and anthropometric factors may play a significant role in the experience of breast reduction surgery.
- Understanding these factors may aid in optimizing patient care and outcomes.