What Is the Most Important Factor of Breast Ptosis? Considerations for Breast Reconstruction Studied with Mastectomy Patients

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INTRODUCTION: Although the evaluation and treatment of breast ptosis have been investigated well, its causes have not been distinctly figured out. The purpose of this study is to identify causing factors associated with an increased incidence of breast ptosis and to confirm the factor that has the strongest impact on the development of breast ptosis.

MATERIALS AND METHODS: This study was performed for 125 patients who presented to a Universitybased plastic surgery clinic seeking consultation for mastectomty and breast reconstruction surgery between 2010 Jan and 2015 Apr. We obtained demographic data, body mass index (BMI), breast tissue weight, history of smoking, feeding and pregnancy. To measure the degree of ptosis, the vertical level of the sternal notch (s) is taken to be zero and the vertical displacements of the lateral terminus (i) and the nipple (n) are calculated from it. and we calculated the breast ptosis ratio(s-n/s-i). If the ratio > 1, we can not only define there is ptosis but also figure out degree of ptosis following the numerical ratio value.

RESULTS: Upon statistical analysis, age, BMI, breast tissue weight and number of pregnancies were found to be significant causing factors for breast ptosis. (P<0.05) Among these factors, breast tissue weight was the most important factor. Neither history of breast-feeding nor smoking was found to be a significant causing factor for ptosis.

CONCLUSION: Age, BMI, breast tissue weight and number of pregnancies are significant causing factors in breast ptosis in our study. We found breast tissue weight is the most important factor of breast ptosis. The larger breast is more likely to develop ptotic change following breast physiologic change. In contrast with autologous flap based breast reconstruction, reconstructed breast with implant will not get out of its shape and aesthetic outcomes get worse in long term.¹ So, in determining a surgical plan, Breast reconstruction with autologous flap is a better choice for a patient who has large breasts compared with implant-based breast reconstruction.

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