

Targeted Two Stage Risk Reducing Mastopexy/Reduction and Straight to Implant NSM

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INTRODUCTION: Nipple sparing mastectomy (NSM) with simultaneous hammock technique straight to implant reconstruction (SIR) is a good method for the reconstruction of risk reduction patients. In spite of the promising method, patients with macromastia and severely malformed breasts remain a challenging group to treat satisfactorily and more often end up having a difficult corrective procedure and unacceptably high rate of failed reconstruction. The aim of this study was to examine if pre-shaping Mastopexy/reduction followed by a delayed NSM/SIR would be a beneficial approach in these challenging cases.

MATERIALS AND METHODS: Patients seeking risk reducing NSM/SIR at our institutions deemed unfit for a one stage procedure based on our previous experience¹ were offered a targeted two stage risk reducing mastopexy/reduction followed by a delayed secondary NSM and SIR. 40 reconstructions were performed in 20 patients aged 43 years (26-57). We registered comorbidities and risk factors, size and shape of ADMs and implants used, the time span from mastopexy to NSM/SIR, time to follow-up, partial or total nipple necrosis and infection, hematoma, skin necrosis and wound dehiscence and reconstruction outcome results.

RESULTS: Reconstruction was achieved without any failure or NAC losses in all 40/40 breasts, 20 bilateral targeted two stage risk reducing mastopexy/reduction and NSM/SIR procedures. Patients median BMI was 30(22-44). Six patients were smokers and one had hypertension. Anatomical shaped silicone implants were used in all cases, average size 555 cc, (310 to 690). Average OR time for NSM/SIR was 125 minutes (90 to 235). The median time between procedures was 133days (105-266). Two patients had a re-operation due to hematoma and fat necrosis. Five patients had minor complications. The median follow-up is currently 220 days (30 to 602).

CONCLUSION: Targeted preshaping mastopexy/reduction of the large, ptotic and deformed breast prior to NSM/SIR has proven to be a successful method to overcome the drawbacks of the procedure for this challenging group of patients. It can be planned and performed safely with a time span of three to four months between surgeries. It appears that the nipple areola complex is pre-conditioned by this two stage approach as we did not experience any vascular compromise or necrosis of the NAC, even in high risk patients.

1. Gunnarsson GL, Børsen-Koch M, Arffmann S, et al. Successful breast reconstruction using acellular dermal matrix can be recommended in healthy non-smoking patients. Dan Med J 2013;60:A4751.