

Technical results and complication rates after skin-sparing and nipple-sparing mastectomy and immediate implant based reconstruction using a porcine tissue matrix **Strattice®** for implant coverage

R. Reitsamer, A. Farmini, E. Gschwandtner, Th. Fischer

Universitätsklinik für Spezielle Gynäkologie – Brustzentrum Salzburg, Paracelsus Medizinische Privatuniversität Salzburg

Introduction

Skin-sparing and nipple-sparing mastectomies are increasingly used for prophylactic and therapeutic purposes and replace conventional mastectomies in selected cases. We report on our first 27 cases of skin-sparing or nipple-sparing mastectomy with immediate implant based reconstruction using a porcine tissue matrix **Strattice®** for implant coverage.

Patients and Methods

In total 27 implant based breast reconstructions using a porcine tissue matrix for implant coverage were performed in 22 patients (5 bilateral) after skin-sparing or nipple-sparing mastectomy. The indications for mastectomy were prophylactic in 3 patients and therapeutic in 19 patients. Five skin-sparing mastectomies with resection of the nipple areola complex and 22 nipple-sparing mastectomies were performed.

Results

In 74.1% (20/27) of the procedures periareolar incision with lateral extension was performed. In 25.9% (7/27) of the procedures the incision was made in the inframammary fold. Pathologic examination of the removed breast revealed multicentric invasive carcinoma in 55.5% (15/27), extensive DCIS with invasive carcinoma in 18.5% (5/27), DCIS in 11.1% (3/27) and was negative in 14.8% (4/27), the prophylactic group. The mean implant size was 290 ml (min 180 ml, max 450 ml). Complications accounted for skin break down with implant loss in 7.4% (2/27), secondary hemorrhage requiring revision in 3.7% (1/27), complete nipple necrosis requiring excision in 3.7% (1/27), minimal nipple necrosis with complete recovery without intervention in 14.8% (4/27) and inflammation requiring antibiotics in 3.7% (1/27).

Patient satisfaction was 95.4% (21/22) and subjective cosmetic result was excellent in 90.9% (20/22).

Conclusion

Skin-sparing and nipple-sparing mastectomies are replacing conventional mastectomies in selected cases. Immediate implant based reconstruction with implant coverage using a porcine tissue matrix **Strattice®** is an innovative approach resulting in an excellent cosmetic result. It is technically feasible and complication rates are acceptably low.



FIG.1 Preoperative sight, arms adducted, elevated

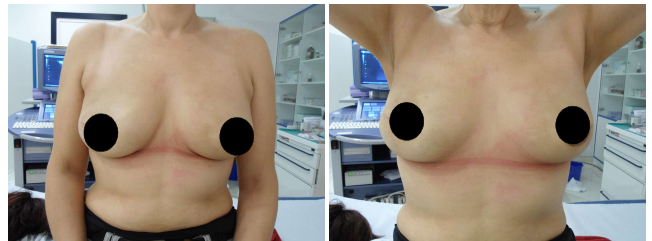


FIG.2 3 months postoperatively, arms adducted, elevated

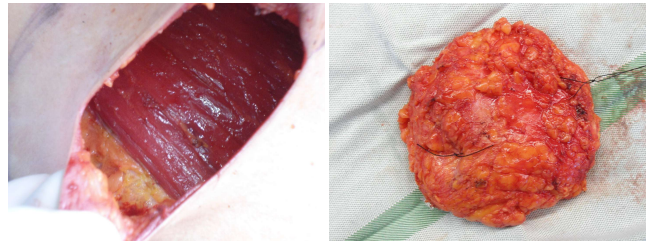


FIG.3 Completely removed breast tissue



FIG.4 Depleated breasts, reconstructed breast with Silicone implant and ADM Strattice®



FIG.5 Skin break down with implant loss



FIG.6 Skin-sparing after hemorrhage, nipple-sparing with minimal nipple necrosis