Our Experience in Breast Reconstruction With a Focus on One-stage Implant-based Reconstruction and Autologous Reconstruction

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The reconstructive options after mastectomy are one-stage or two-stage alloplastic reconstruction and autologous reconstruction. The recent interest for one-stage reconstruction drew attention on coverage techniques of inferolateral implant pole, such as the harvesting of fascial flaps, acellular dermal matrix or titanium-coated polypropylene mesh. Furthermore, the plastic surgeon must have in his armamentarium the most recent techniques for autologous reconstruction in order to provide the widest range of surgical opportunities.

In 2013 we performed 55 reconstructions with expanders and/or implant (one-stage or two-stage reconstruction) using a submuscular-subfascial pocket and contralateral symmetrization when needed. The submuscular-subfascial pocket consists in pectoralis major muscle and extension of superficial pectoralis fascia or deep pectoralis fascia laterally sutured with serratus anterior fascia. We performed autologous reconstruction (latissimus dorsi flap and TRAM flap) in 3 patients previously irradiated. We evaluated aesthetic outcome for single reconstructive technique. Patient satisfaction and aesthetic outcomes were excellent-good in 85% of patients in one-stage alloplastic reconstruction group versus 80% in two-stage reconstruction group. In autologous reconstruction were excellent-good in all patients.

The coverage of implant with muscular-fascial layer provides a good aesthetic result with optimal projection of inferolateral pole of reconstructed breast. One-stage reconstruction is not recommended when skin flaps are injured, due to the possibility of skin-flap and nipple-areola complex ischemia. In autologous reconstruction, we must keep in mind that pedicled flaps are associated with donor site morbidity, whereas free flaps require more operating time, special equipment and adequate surgical training.