Introduction. Plastic reconstruction surgery at patients with breast cancer is of integral part of women’s social-psychological rehabilitation. Postoperative physical defect removing is considered today as psychic frustration treatment connected with organ loss. Momental breast reconstruction is an effective method to remove cosmetic consequences of radical operation.

Clinical material and methods. In the surgery departments of Sumy Regional Oncological Centre from 2000 till 2006 12 breast reconstructions following mastectomy were carried out. Reconstructions following by radical mastectomy according Patey and Madden at patients with IIa stage of breast cancer. Three patients with I stage were operated subcutaneously mastectomy with nipple-areola complex preservation and axillary dissection. Six patients were rehabilitated with TRAM flaps. At two of them skin cover and nipple-areola complex was saved partly. In four cases nipple-areola complex was removed with excision of skin on tumor and nipple-areola complex was prototyped from skin. At three patients were made transposition of latissimus dorsi musculo-cutaneous flap with installation of endoprosthetic appliance between latissimus dorsi muscle and great pectoral muscle. Three patients were implanted with endoprosthetic appliance under great pectoral muscle after subcutaneous mastectomy.

Results. The Analysis of the latest results of reconstruction operations has shown that all musculo-cutaneous flaps proved to be viable. After performing of subcutaneous mastectomy depigmentation of nipple-areola complex develops under long term of observation. Three observations of the partial marginal necrosis of the subdermal fat were noted at patients in 3-6 months after breast reconstructions with TRAM flap. Checking examinations of the analysed group of patients haven’t revealed the relapse of the main disease.

Findings. Breast reconstruction following mastectomy with taking into account localizations and spreading of cancer process allows to shorten the process of reabilitations of breast cancer patients to minimum.