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The possibilities of surgical cover of skin defect in locally advanced breast cancer

A specific kind of surgical treatment is the treatment of locally advanced breast cancer. Simple mastectomy is performed both in cases of ductal carcinoma *in situ* and in cases of locally advanced breast carcinoma. In cases of ulcerating breast carcinoma the term "toilet" mastectomy is used to emphasise the improvement of hygienic condition of a patient. Surgical treatment is usually combined with radiotherapy, chemotherapy or hormonotherapy depending on TNM advancement, age and condition of a patient (1).

The aim of this study was to evaluate three methods of covering skin defect after the dissection of locally advanced breast cancer. We used abdomen skin flap, skin grafts and *latissimus dorsi* myocutaneous flap. The size of ulceration and malignant infiltration in locally advanced T4b breast carcinoma resulted in the lack of skin after classical simple mastectomy.

The application of rotated skin flap from the abdomen causes the risk of necrosis. The size of such flap is also limited. Skin grafts incur the risk of rejection and infection. These complication may significantly delay the healing of wound.

Breast reconstruction operations are performed after mastectomy for breast carcinoma with the use of expanders, endoprosthesis, or myocutaneous flaps. The reconstruction with *latissimus dorsi* myocutaneous flap requires endoprosthesis to achieve the desired effect. For this reason transverse rectus myocutaneous abdominis flap is most frequently used nowadays; although this method may cause disorder in the vascularization of the adipose tissue cutaneous flap. Although this flap is apparently the best to use, however, the extent of the surgery and the counter-indications (e.g. poor condition of a patient, any previous operations in the abdominal area, and a patient's age which is related to arteriosclerosis) limit its use in such cases. In our region female patients with breast cancer in high degree of local advancement still occur. In order to improve the

quality of life the excised skin on the chest is replaced with *latissimus dorsi* myocutaneous flap. We use this flap because it guarantees good vascularization and the size of the skin flap is sufficient to cover the defect (2, 3, 4).

METHODS

In the years 1993-1998, 95 simple mastectomies were performed, 4 of which were performed with the use of *latissimus dorsi* myocutaneous flap, 2 with the use of rotated abdominal skin flap and 1 with skin graft. The female patients were aged 64-74 years (median age 67), in T4bN2M0-1 degree of clinical advancement, after surgery they were treated with radiotherapy and hormonotherapy. The median survival period was approximately 2.1 years.

CONCLUSIONS

The quality of life of the patients with locally advanced breast cancer is very poor. The use of *latissimus dorsi* myocutaneous flap to supplement skin defect after "toilet" mastectomy in advanced breast carcinoma is perfectly justified and considerably improves the last period of a patient's life. A worse solution is covering skin defects with rotated abdominal skin flap which may be used to cover only the defects which do not extend to the subclavicular area. The worst method is the use of skin grafts. Skin grafts expose patients to the danger of delayed healing of the wound.

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SUMMARY

Three types of surgical procedure were applied to cover skin defect in locally advanced breast cancer after simple mastectomy. The skin defect was impossible for primary suture. In four cases we used *latissimus dorsi* myocutaneous flap with a very good effect. In two cases skin flap from the abdomen was used, and one case skin graft. The female patients survived 2.1 years with better quality of life.

Możliwości uzupełnienia ubytku po chirurgicznym leczeniu miejscowo zaawansowanego raka piersi

Zastosowano trzy rodzaje chirurgicznego pokrywania ubytków skóry po leczeniu miejsowo zaawansowanego raka piersi, ponieważ pierwotne zszycie skóry było niemożliwe. W czterech przypadkach ubytek pokryto płatem skórno-mięśniowym opartym na mięśniu najszerszym grzbietu, z bardzo dobrym efektem. U dwóch chorych zastosowano przesunięty płat skórny z brzucha, a u jednej chorej zastosowano przeszczepy skórne pośredniej grubości. Kobiety przeżyły 2,1 lat przy znacznie wyższej jakości życia.