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Locoregional recurrence of breast cancer: a retrospective comparison of treatment methods

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The study was made to evaluate the clinical and pathological features of breast cancer patients with locally recurrent breast cancer and to assess the impact of the treatment method on their prognosis.

Fifty-four patients with local recurrence after breast cancer were treated in Greatpoland Cancer Center between 1983 and 1995. It constituted 6.2% (54/878) of all patients with breast cancer treated in this period. Median length of interval between primary lesion and recurrence was 26.6 months, in 12/54 cases (22.2%) was longer then 5 years. Patients in time of recognizing primary breast cancer had tumor in clinical stage T2 (n=25) and T3 or T4 (n=29), in stage N0 (n=16) and N1 (n=36). Patients with recurrent breast cancer were treated using different methods. In 26 cases recurrent tumor was excited and then, in 15 cases irradiated, in 11 cases irradiated and additionally treated by chemotherapy or by hormonotherapy. In 28 cases patients were disqualified for excision due to local advance of disease. They were all irradiated and then treated by chemotherapy (n=17) or hormonotherapy (n=11). 5-year survival rates were compared with the chosen clinical factors (age, clinical stage, histopathology), length of interval between primary tumor and recurrence and with different methods of treatment including excision or not.

5-year overall survival rate was 33.3%. In locally advanced tumors (stage T3) the effect was worse then in stage T2 tumors. Five-year survival rates after recurrence were 20.8% and 52.0%, respectively (p=0.001). No statistically important correlations between lymph node involvement, age, histology and survival rate were found.

Differences between 5-year survival rate were observed according to length of interval between recognizing the primary lesion and recurrence. Patients with interval shorter then 24 months had survival rate 14.3%, between 24 and 60 months – survival rate 64.3% and with interval longer then 60 months – 41.7%. Statistically important differences were noted between first and second group (p=0.01) and first and third group (p=0.03).

Patients treated with local excision followed by radiotherapy and/or systemic therapy had greater 5-year survival rate (53.9%) then patients disqualified for incision (14.3%) (p=0.0001).

Key words: Breast cancer, local recurrence, radiotherapy.

Recurrence of a disease many years after successful treatment or removal of the primary tumor is a frequent clinical observation. Local recurrence of breast cancer means first occurrence of tumor after disease-free period.

Local recurrence following mastectomy is usually presented as one or more asymptomatic nodules in or under the skin of the chest wall typically located in or near the mastectomy scar. It can occur as a tumor in the chest wall, surrounding skin, residual breast tissue and in ipsilateral axillary and supraclavicular lymph nodes [17].

A few patients present with diffuse chest wall involvement, more commonly seen in patients with locally advanced tumors originally. Carcinoma *en cuirasse* is a distinct form of diffuse infiltration of the skin or subcutaneous tissues of the chest wall with woody induration and spread of tumor well beyond the limits of standard surgical or RT boundaries.

Local recurrence following mastectomy differs from recurrence after tumorectomy in the clinical follow-up, method of treatment and prognosis.

Risk of local recurrence depends on tumor size (T), presence and number of axillary lymph node metastasis (N), method of surgical treatment and complementary treatment [8, 12, 15, 17].