Original Research Article

**Evaluation of the impact of individual and environmental factors on the prognosis of women with vulvar cancer**

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**Abstract**

**Introduction**

Vulvar cancer is a rare type of cancer. In Poland in 2010 there were 491 cases of vulvar cancer. Prognostic factors that may influence the course of the disease and results of treatment can be divided into factors associated with tumor, individual factors of the patient (age, socioeconomic status, co-morbidities, body weight, motivation to comply) and environmental factors.

**Aim**

The purpose of this research was to evaluate the impact of individual and environmental factors on the prognosis of women with vulvar cancer, regardless of the clinical stage.

**Material and methods**

The study group consisted of 48 patients with invasive squamous cell carcinoma of the vulva treated surgically in the Department of Gynecological Oncology in Olsztyn in 1995–2008. Analysis included age, place of living, occupational status, marital status, obstetric history, co-morbidities, body weight, and healing of post-operative wound. Univariate analysis of the effect of these factors on survival and recurrence rates was performed.

**Results and discussion**

Univariate analysis showed a relationship between impaired post-operative wound healing and recurrence rate (p<.05). Wound healing complicated by abscess formation occurred most frequently in patients with T2 stage tumor and did not correlate with lymph node involvement. No effect of age, body weight, age at menarche and age at menopause, and number of births on the presence or absence of recurrence was observed (p<.05).

**Conclusions**

In patients with post-operative wound healing complications due to infection statistically significant worse survival rates have been observed. Vulvar cancer was repeatedly diagnosed 22 years after menopause, in its advanced stages (according to FIGO 1988). No correlation between survival rate and demographic factors, environmental factors, gynecological and obstetric history and co-morbidities was demonstrated. Difference between overall survival and disease-specific survival, that is, excluding deaths from causes unrelated to cancer, was 10%.

**Keywords**
SCC of the vulva; Wound healing; Infection of wound; Recurrence; Menopause