

Summary

The aim of this study was a prospective detection of postoperative lymphedema of the lower limbs in patients after the surgery for cervical and vulvar cancer using different methods of examination and their comparison and monitoring of postoperative complications and quality of life.

Totally 78 women were followed after the surgery for cervical cancer and 36 for carcinoma of the vulva. Due to the radicality of the surgery the patients were divided into the conservative and radical groups. Lower limbs lymphedema were evaluated preoperatively and 3, 6 and 12 months after the surgery by the measurement of the lower limbs circumference, multifrequency bioelectrical impedance analysis (MFBIA) and subjective feeling. Quality of life using the European Organisation for Research and Treatment of Cancer (EORTC) questionnaires was evaluated before and 6 and 12 month after the surgery.

12 months after the cervical cancer surgery 35.9 % of patients reported subjective lymphedema, 37.18 % lymphedema were objectively diagnosed by the measurement of lower limb circuits and in 52.56 % of cases the increase of amount of extracellular fluid was detected by the MFBIA R_i/R_0 method. The prevalence of lymphedema after the surgery for vulvar cancer reached 19.44% by the subjective assessment, 38.89 % by the measurement of limb circuits and 66.67 % using MFBIA R_0 method. BMI above 30 was the 3.1-fold higher risk factor for the development of the lymphedema after the surgery for cervical cancer. In terms of quality of life in women after the surgery for cervical cancer the deterioration of physical function, pain, lymphedema, peripheral neuropathy and menopausal symptoms was occurred. Greater fatigue and impaired sexual functions were also detected after more radical surgery. Increased fatigue and impaired lymphedema were diagnosed in patients after the vulvar cancer surgery.

The prevalence of the postoperative lymphedema significantly depends on the diagnostic methods which are able to detect lymphedema in various stages. The most sensitive method for detection of lymphedema of the lower limbs was MFBIA which already discovered their early stages. Preoperative objective measurement of the lower limbs is important for early detection of postoperative lymphedema to compare both results before and after the surgery. Early detection allows careful observation of the high-risk patients with the immediate start of treatment when the deterioration begins.