<u>Sumary</u>

COMPRESSION STOCKINGS IN PREVENTION OF LOWER EXTREMITY LYMPHEDEMA IN WOMEN UNDERGOING TREATMENT FOR GYNECOLOGICAL MALIGNANCIES.

Background: Lymphoedema of the lower limbs (LLL) is a serious complication of the treatment of malignant tumors of the genital organs, affecting 6-50% of treated women. Knowledge about methods of preventing lymphoedema in this group of patients is limited. The only major prospective randomized study in patients undergoing inguinal lymphadenectomy for melanoma showed no benefit from class 2 compression stockings.

Objective: To assess effectiveness of class 2 compression stockings in prophylaxis of lower extremity lymphedema in women undergoing treatment for gynecological malignancies

Material and Method:

Methods: 60 women undergoing surgery for gynecological malignancies (cervical, uterine, ovarian, vulvar cancer) with planned inguinal lymphadenectomy, were randomly assigned to prophylactic class 2 round-knitted compression stockings (CG) or to usual care group (NCG). Women with a history of lymphoedema, venous oedema, congestive heart failure, renal failure, hypothyroidism, metastases and relapse, or other malignancies treated within 5 years of study entry were excluded from the study. Women with an ECOG score > 2, leg ulcers and severe lower limb ischemia (Fontaine class \geq 2) were also excluded from the study. Prior to the surgery anthropometric measurements (BMI), leg volume assessments were performed and women's complaints were assed with Likert type scale. In addition, women assigned to CG group answered ICC compression questionnaire part 1. Follow- up visits were scheduled 3, 6 and 12 months after surgery. Leg volume measurements (WAC). During the last

visit anthropometric measurements, EORTC-QLQ-C30 questionnaire and women's complaints were assessed. Additionally, women in CG group answered ICC compression questionnaire part 2.

Results:

One woman, 9(3.4%) from the CG group, had lymphoedema. In the NCG group, 12 women (38.7%) were diagnosed with lymphoedema and class 2 compression stockings were prescribed. Weight adjusted volume change (WAC) after 12 months was significantly higher in the control group (no compression) than in the study group CG. No significant leg volume change (WAC) was noticed in the study group (compression stockings). Pitting edema was noticed in 8 women from the control group and no women in the study group. No difference in the QOL was found between the control and the study group.

Conclusions: Prophylactic compression stocking are effective in prevention of leg lymphedema in women undergoing surgery for gynecological cancer. Wearing prophylactic compression stockings did not affect QOL, however, it reduced the subjectively felt ailments, i.e. the feeling of heaviness in the legs, pain and numbness of lower limb.

Key words: Compression therapy, Lower limb lympodema, Quality of life after treatment for gynecological malignancies, Physical complaints after oncological treatment