

## STRUCTURED ABSTRAKT

**Title:** Importance and methods of sentinel nodes identification in endometrial cancer

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**Objective:** To evaluate the results of three different protocols of sentinel node identification in endometrial cancer.

**Design:** Prospective observational study.

**Setting:** Department of Obstetrics and Gynecology, Charles University, 2nd Medical Faculty, University Hospital Motol, Prague, Czech republic.

**Methods:** 141 women with verified endometrial cancer were included into the study. 10 subjects were excluded due to the duplicity with another malignant tumour, extrauterine spread and non-endometrioid type of the tumour. Three different protocols for sentinel lymph node detection were described: Tc99 was applied hysteroscopically peritumorous in 22 women. Subserous peritumorous application of the radiocolloid and patent blue dye was performed in 66 women. Subserous diffuse injection of this combination to eight sites was performed in 43 subjects.

**Results:** 2220 lymph nodes were harvested in 131 women, average 16.9 per subject. 215 sentinel lymph nodes in 91 women were obtained, average 2.36 per subject. Detection rate was 69.46. 63.4% sentinel nodes were identified in the external iliac area, 17.8% in supraobturator area, 8.9% in common iliac area, 4.25% in medial part of lateral parametrium, 3.3% in praesacral and 3.3% in lower paraaortal area. The three subgroups with different route of tracer application were homogenous regarding age, BMI, myometrial invasion, number of lymph nodes harvested, stage or grade ( $p > 0.05$ ). In hysteroscopy group the detection rate was 45.5%. In subserous peritumorous subgroup the detection was successful in 48 out of 66 cases (72.7%). In the subserous diffuse subgroup the detection rate reached 76.7%.

**Conclusion:** The concept of sentinel node identification in endometrial cancer remains yet experimental. If the tracer is applied into the uterine corpus, the distribution of sentinel nodes differs from the intracervical application in cervical cancer. Subserous application is superior to hysteroscopic. Further prospective multicentric trials are necessary to find the best method for sentinel nodes identification and to establish the role of this procedure in patients treatment.

**Key word:** endometrial cancer, sentinel lymph nodes, hysteroscopic administration, subserous administration.