SLN mapping for early endometrial cancer with concurrent two different tracers (radioactive and ICG); a pilot study.

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Background

The detection of true sentinel node (SN) is crucial to replace the systematic lymphadenectomy. We analyzed whether using two different tracers, applied in slightly different way to the cervix, shows the same SN.

Methodology

A prospective observational study included all consecutive women with apparently early endometrial cancer between 2016-2018 at the Department for Gynecologic and Breast Oncology, Maribor, Slovenia, who signed informed consent. All women had application of radioactive tracer before the surgery to four sites in the cervix and indocyanine green (ICG) to two sites in the cervix in two depths at the beginning of the surgery. First the SN was located with the radioactive tracer and secondly with ICG. Bilateral mapping was demanded. If the SN was not found and the patient had intermediate/high risk disease, one sided pelvic lymphadenectomy was performed.

Results

Forty out of 44 included patients (90.9%) had FIGO I stage and 4 (9.1%) had positive lymph nodes. When using both methods (radioactive and ICG), the detection rate was 70.5%. Bilateral detection rate was very low with radioactive tracer alone (5/44; 11.4%) and moderate with ICG (25/44; 56.8%). The detection rate per hemipelvis with radioactive tracer was 36/88 (40.9%) and with ICG 65/88 (73.9%). At 2 hemipelvises the radioactive labeled node was a different node than ICG labeled node. In one hemipelvis the histology between the nodes differed (ICG node was positive, radioactive node was negative).

Conclusion

We demonstrated different detection rates using different tracers and more importantly when the tracers are applied in different ways to the cervix the sentinel nodes may differ, raising the question which node is true sentinel node. According to our first results we warrant to conduct a prospective multicentric larger study and if possible to use more tracers at the same time.

Disclosures

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