Sentinel node mapping in endometrial cancer staging has gained popularity among gynecologic oncology community. Although endometrial cancer represents the most common gynecological malignancy in developed countries several features of its management are still objects of debates. In particular the role of lymphadenectomy is still unclear (1). Accumulating data underlined that sentinel node mapping is not inferior to conventional lymphadenectomy (2,3). However, sentinel node mapping seems to be superior to conventional lymphadenectomy. The adoption sentinel node mapping instead of lymphadenectomy reduces the risk of developing surgery-related morbidity. Moreover, sentinel node mapping allows detecting patients with low volume disease (i.e., micrometastases and isolated tumor cells) otherwise missing without pathological ultrastaging. Recent data underlined that low volume disease not identifiable with conventional lymphadenectomy accounts for 30% of all node positive endometrial cancer (4).

The uterus has a complex lymphatic drainage. Owing to the importance to perform an accurate mapping, surgeons still debate on the preferred site of injection for the detection of sentinel nodes. Although cervical injection is a simple procedure and guarantees a high detection of pelvic nodes in the pelvic area (in both emi-pelvis), corporal injection ensures delineation of lymphatic drainage from the tumor area, thus achieving accurate detection of sentinel nodes.

By this point of view cervical injection is aimed to detect the first nodes draining the lymph from the uterus; while corporal injection is aimed to detect the first nodes draining the lymph from the uterus. In most cases they are the same nodes, but few patients (with skip lesions) might benefit from peri-tumoral injection.

In the present paper, Farazestanian et al. investigated how cervical and fundal injection might influence sentinel node detection rates. The authors performed (in the same 45 patients) a head to head comparison of intra-cervical radiotracer and fundal blue dye injections (5). They observed that lymphatic drainage in the pelvic area from the uterine cervix matches with the lymphatic drainage in the pelvic area from the uterine corpus. Additionally, para-aortic sentinel nodes were detected in 2 (4.4%) and 10 (22.2%) patients having cervical and fundal injections (5). These findings are concordant with the data reported by Cormier et al., observing that corporal injection improve para-aortic detection rate in comparison with cervical injection (6). Para-aortic mapping was most frequent after corporeal injection techniques (39%), and was higher after deep vs. standard cervical injection (17% vs. 2%) (6). The ongoing prospective randomized SNEC trial will clarify pros and cons of adopting cervical and hysteroscopic injection for sentinel node mapping for endometrial cancer staging (7). Further studies are warranted to address what are the most useful techniques for detecting lymphatic diseases in endometrial cancer. Moreover, we auspicate that the adoption of genetic/molecular disease profiling would useful, per se, to tailor treatments independently to staging procedures, thus improving patients’ care.
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Footnote

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