Sentinel Lymph Node Biopsy in cervical cancer: an update

Balaya Vincent1, 2, C Rossi L, Cornou C, Bensaid C, De Foucher T, Mounisambote L, Nguyen-Xuan Ht, Pierret M, Nos C, Bats AS and Lecuru F
1Hôpital Européen Georges Pompidou, France
2Unité de Recherche en Développement, Imagerie et Anatomie, France

Uterine cervical cancer is the second gynaecological cancer worldwide. Its incidence started remarkably dropping in developed countries where it is mostly constituted of early stages that are associated with good prognosis. As a consequence, the major concern became to find ways to improve the quality of life of the affected patients and to limit the considerable iatrogenic morbidities resulting from the treatments provided primarily pelvic lymphadenectomy. Sentinel lymph node biopsy was developed for this aim.

Normally a sentinel node corresponds to the first node that drains a solid tumour as such; its status is considered representative of the status of the other draining nodes. The objective of this technique is to perform a selective sentinel lymph node sampling while preserving the remaining lymph nodes in a way to limit the morbidities mostly those related to the lymphatic drainage. It was shown in the literature that the combined isotopic and colorimetric technique with the capacity of pre and intra-operative detection was an applicable strategy with an excellent detection rate and diagnostic value and with minimal false negative results when it comes to bilateral detection. This combined technique also puts into evidence the aberrant drainage territories that are not systematically picked during lymphadenectomies and can be the source for future recurrence. Another advantage to be added to the list is lymph node ultra-staging; this anatomopathological processing is performed over a limited number of nodes and aims at detecting the micrometastases that can be missed on the routine processing performed over lymphadenectomies specimen and that are of major prognostic importance. Concerning the indications, sentinel lymph node biopsy concerns patients with early stage cervical cancer and with small tumour size. Novel methods like fluorescence and SPECT-CT are now being investigated as new strategies of detection aiming at the improvement and implementation of this technique in the daily practice.

Early stage uterine cervical cancer is associated with a good prognosis, especially in patients without nodal metastases. The management should take into consideration the quality of life of patients by reducing the iatrogenic morbidities related to the treatment. Sentinel lymph node biopsy can solve this drawback. The combined technique proved itself as a feasible strategy with excellent detection rates and diagnostic value.

Biography

Balaya Vincent is resident of Obstetrics/Gynecology in the Department of Gynaecological, Oncological and Breast Surgery at Georges Pompidou European Hospital in Paris and researcher at the Human Anatomy Department at University Paris Descartes.

vbalaya@hotmail.com

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