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Lymphadenectomy Indications in Endometrial Cancer. A Surgeon's Dilemma in the Era of Perpetual Changes

Ioana-Maria Ignat[1], Corina-Elena Minciuna[1,2], Romina-Marina Sima[1,3], Liana Ples[1,3], Mircea Octavian Poenaru[1,3], Andrei Diaconescu[1,2], Catalin Vasilescu[1,2]
[1]Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
[2]Department of General Surgery, Fundeni Clinical Institute, Bucharest, Romania
[3]Department of Obstetrics and Gynecology, Bucur Maternity, Saint John Hospital, Bucharest, Romania

Abstract

Background: The role of lymphadenectomy in endometrial cancer has long been debated. Once considered to have prognostic and therapeutic value, it is now evident that balancing accurate staging with procedure-related morbidity remains a challenge. Objective: This review aims to clarify the current indications for systematic lymphadenectomy in endometrial carcinoma, integrating the updated FIGO 2023 staging system, the ESGO-ESTRO-ESP 2025 guidelines, and the emerging role of molecular classification.

Methods: We analyzed landmark randomized controlled trials, updated guideline recommendations, and the evolving paradigm of sentinel lymph node (SLN) mapping, with emphasis on risk stratification based on histology, grade, lymphovascular space invasion (LVSI), and molecular features.

Results: High-level evidence demonstrated that systematic lymphadenectomy does not improve survival in early-stage disease, while significantly increasing morbidity. Current guidelines remain complex, but consistently emphasize SLN mapping as the preferred method of nodal assessment. Systematic lymphadenectomy is no longer justified as routine; it is reserved for high-intermediate and high-risk patients when SLN mapping fails, performed as side-specific dissection. In advanced disease, the surgical goal is complete cytoreduction, with selective removal of bulky or suspicious nodes; systematic lymphadenectomy must not be performed in stages III-IV.

Conclusion: The paradigm has shifted from universal lymphadenectomy to a tailored, risk-adapted approach. SLN biopsy represents the new standard, reducing morbidity without compromising oncologic outcomes. Expanding access to molecular profiling, still limited in Romania, is crucial for better oncological results and alignment with European standards.

Keywords: endometrial cancer, lymphadenectomy, sentinel node, FIGO 2023, ESGO–ESTRO–ESP 2025, molecular classification