

No benefit of lymphadenectomy for advanced ovarian cancer



Patients with advanced ovarian cancer do not benefit from systematic pelvic and para-aortic lymphadenectomy as previously supposed, but are more likely to experience serious postoperative complications, according to a recent study.

In the randomised LION trial, Philipp Harter (Kliniken Essen-Mitte, Essen, Germany) and colleagues enrolled 647 patients with newly diagnosed advanced ovarian cancer (International Federation of Gynecology and Obstetrics stage IIB–IV) who had already undergone macroscopically complete resection and whose lymph nodes were normal before and during surgery. Patients were randomly assigned between December, 2008, and January, 2012, either to undergo lymphadenectomy (n=323) or not to undergo lymphadenectomy (n=324). The primary endpoint was overall survival.

Patients who had lymphadenectomy had a median of 57 nodes (35 pelvic and 22 para-aortic) removed. Median overall survival was similar in the two groups: 65.5 months in the lymphadenectomy group versus 69.2 months in the observation group (hazard ratio [HR] 1.06; 95% CI 0.83–1.34; p=0.65). Serious postoperative complications occurred significantly more frequently in the lymphadenectomy group than the no-lymphadenectomy group (eg, 40 [12.4%] of 323 vs 21 [6.5%] of 324 patients, respectively, had repeat laparotomy for complications [p=0.01]; and ten [3.1%] of 323 vs three [0.9%] of 324 patients, respectively, died within 60 days after surgery [p=0.049]).

“Optimal management of lymph nodes in advanced ovarian cancer remains undefined”, explained Harter. “In this study of systematic lymphadenectomy versus observation, we were unable to identify a

benefit regarding prognosis with lymphadenectomy, but results did indicate a higher rate of postoperative morbidity in those patients. Accordingly, the removal of clinical negative nodes in this situation is not indicated.”

“[This study shows] patients with advanced epithelial ovarian cancer and no suspicious bulky nodes undergoing macroscopic peritoneal and parenchymal complete resection do not benefit from systematic lymphadenectomy, but experience a significantly higher rate of intraoperative and postoperative complications”, commented Anna Fagotti (Gemelli University Hospital, Rome, Italy). She added, “From now on, there is no reason to perform lymphadenectomy in this subgroup of patients.”

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For the study by Harter and colleagues see *N Engl J Med* 2019; **380**: 822–32