

it would preclude its use by government agencies and academic centers with large administrative databases and for the majority of surgical studies submitted for peer review publication.

Dr Haylen and colleagues attempt to reinterpret our reliability data by eliminating noncorrelation based on medical record issues suggesting that once these are eliminated, the agreement is "very acceptable." Unfortunately, it is not clear what assumptions they made and we are not able to duplicate their calculations. As noted in Table 3 of our paper, disagreement between reviewers because of insufficient information in the medical record was noted in only 16 patients (12%) and eliminating them does not appreciably improve the reliability measures (kappa for vaginal category .34).

One of our criticisms that Haylen et al disagreed with was that the IUGA/ICS classification system does not allow the gradation of severity. To illustrate this point we offer an example. A patient experiencing urinary retention after a sling is categorized as 4B. However, it requires a minimal intervention of a simple sling lysis, with moderate burden to the patient. In contrast, another patient may be suffering from vaginal constriction and dyspareunia, and undergo numerous interventions in the effort to correct this, yet still may remain debilitated by chronic pain. Despite a much greater burden, this patient would be categorized as 1B.

We very much appreciate the significant efforts that these authors have made to develop a tool that has such clinical need. Unfortunately, our data suggest that the system has poor inter-rater reliability. We strongly encourage careful validity and reliability testing of this and any similar classification system before wide-spread adoption. ■

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Validity of intraoperative evaluation of myometrial invasion and preoperative grading in endometrial cancer

TO THE EDITORS: We read with great interest the recent analysis of systematic lymphadenectomy in endometrial cancer (EC) that was reported by Bendifallah et al.¹ This study suggests that omission of systematic pelvic lymphadenectomy in women undergoing primary surgery for presumed stage I with grade I or II EC has no impact on disease outcome and overall survival.

However, intraoperative identification of lymph node involvement and precise disease stage in patients with EC is somewhat problematic. In a retrospective analysis of 128 patients with EC, we observed only a fair agreement between preoperative and postoperative evaluation of myometrial invasion (quadratic-weighted Cohen kappa, 0.30; 95% confidence interval, 0.12–0.48; $P = .0006$). The sensitivity, specificity, and positive and negative predictive values of intraoperative frozen section for the detection of $\geq 50\%$ myometrial invasion were 76.3%, 96.4%, 95.7%, and 79.1%, respectively. This, in turn, can be translated as almost 20% of patients assumed to have early disease stage actually have advanced disease with possible pelvic/paraortic lymph node involvement. Skip metastasis is also another concern in the staging and decision of systematic lymphadenectomy in these patients. Of patients, 16% have only isolated paraortic lymph node involvement.²

Preoperative tumor grading with intraoperative assessment of depth of myometrial invasion and histologic subtype has been reported to correlate poorly with final pathologic grade. A higher grade on final pathologic assessment will be diagnosed in 25% of patients with preoperative grade 1 disease and 3% will be diagnosed as nonendometrioid or grade III disease.³ The risk of underestimating the grade during intraoperative assessment in patients with grade 2 disease has been reported as approximately 29%, as well. Clinically relevant upstaging occurs in 18% of patients.⁴

In contrast to the authors' conclusion, we think that decision-making on systematic lymphadenectomy in patients with EC according to preoperative grade and intraoperative myometrial invasion may put a considerable number of patients with presumed early-stage disease at risk of incomplete surgery and adjuvant therapy. ■

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REPLY

We would like to thank Drs Toptas and Simsek for their comments regarding our recent article. Analyzing a large population-based database of patients with endometrial cancer (EC), we found that omission of systematic lymphadenectomy in women with stage I grade I or II EC has no impact on survival.

The comments of Toptas and Simsek suggest that the proper question to ask is not whether lymphadenectomy has survival influence but rather how to improve prediction of lymph node (LN) involvement and evaluate the disease stage in patients with EC. We agree with this point of view. To date, the therapeutic value of systematic lymphadenectomy is still controversial, and guidelines regarding the type and extent of LN dissection are debated. In clinical practice the decision to perform systematic lymphadenectomy depends on both primary site tumor characteristics (ie, grade differentiation, histological subtype, deep myometrial invasion, lymphovascular space invasion, and cervical stromal involvement) and clinical parameters (ie, age and comorbidities). As underlined by Toptas and Simsek, identification of LN involvement and correct disease staging is essential to decide the best therapeutic approach. Clinical and pathological variables (eg, myometrial invasion, histological type, and grade) have been almost constantly reported to be associated with the risk of LN metastasis, but individually none of these characteristics can be used to identify a subset of patients for whom LN resection is unnecessary.¹ As emphasized by Toptas and Simsek, nowadays the accuracy of preoperative evaluations of myometrial invasion, tumor grade, and primary tumor extension is unfortunately not adequate to determine whether lymphadenectomy is required or not.

Moreover, the accuracy of frozen section has been demonstrated when the tumor diameter is <3 cm.²

In this context, we have developed and validated a robust nomogram based on clinical and routinely definitive pathological characteristics of the hysterectomy specimen that is able to predict the risk of LN metastasis in patients with EC.³ By providing predictions that are both evidence based and individualized, these estimates have the potential to improve medical decision in management and to help inform the decision-making process of physicians.

In contrast to Toptas and Simsek comments, in cases of underestimation of the myometrial invasion or grade, it is possible to perform a secondary lymphadenectomy and to adapt the adjuvant therapy upon the definitive pathological findings. To conclude, our intention is not to undertreat patients but to promote individualized procedures to avoid unnecessary lymphadenectomy surgery. ■

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