COULD THE PREOPERATIVE STATUS OF P53 MUTATION ANDMismatch Repair Deficiency Be Useful As Predictive Biomarker For The Extent Of Surgery In Early-Stage Endometrial Cancer Patients?

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Introduction/Background Staging operations for early stage endometrial cancer are performed uniformly, despite the fact that pathologic information can be obtained prior to surgery. According to molecular categories identified in the Cancer Genome Atlas, p53 mutation and MMRd are associated with poor prognosis. If there is a correlation between the molecular profile obtained from endometrial biopsy tissue and the extent of disease after surgery, it may be possible to personalize surgical planning.

Methodology This study compared the p53 and MMR status of 173 patients with newly diagnosed and clinically staged I-II endometrial cancer who underwent surgical staging, with their final pathological results. All were classified into three groups based on their molecular profiles: abnormal p53, MMRd, and NSMP (no specific molecular profile). We analyzed the involvement status of cervix, adnexa, and lymph nodes and 2-year progression-free survival using Kruskal-Wallis test and log-rank test, Cox proportional hazard model.

Results Out of 173 patients, 17 (9.8%) were assigned to p53 abnormal group, 33 (19.1%) to MMRd group, and 123 (71.1%) to NSMP group. Among them, 18 (10.4%) had cervical involvement (p = 0.115), 8 (4.6%) had adnexal involvement (p = 0.328), and 8 (4.6%) had lymph node involvement (p = 0.860) indicating no statistically significant relationship between molecular profile and disease extent. Two patients in the NSMP group expired. 3 in MMRd group, 1 in p53 abnormal group, and 6 in NSMP group experienced recurrence (p = 0.328), and 8 (4.6%) had lymph node involvement (p = 0.860) indicating no statistically significant relationship between molecular profile and disease extent. Two patients in the NSMP group expired. 3 in MMRd group, 1 in p53 abnormal group, and 6 in NSMP group experienced recurrence. There was no statistically significant difference in progression-free survival rates among the groups (p = 0.6). and hazard ratios between the MMRd group and each of the other groups.

Conclusion Molecular profiles do not seem to determine the prognosis based on the difference in stage at first onset in early stage endometrial cancer. Staging operations should follow current guidelines, but it is necessary to make efforts to individualize treatment plans based on information obtained through preoperative histology.

Disclosures There are no financial conflicts of interest to disclose.

SECONDARY CYTOREDUCTIVE SURGERY IN ENDOMETRIAL CANCER RECURRENCE: A PREOPERATIVE PREDICTION MODEL FOR COMPLETE GROSS RESECTION

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Introduction/Background Endometrial cancer (EC) relapse is a heterogeneous disease whose recurrence patterns vary between loco-regional, lymph-nodal, parenchymal or peritoneal. Recurrences can occur as single or multiple nodules and follow single or mixed pathway. Only a minority of patients is considered eligible for secondary cytoreductive surgery (SCS). We retrospectively analyzed clinico-histological-radiological variables of EC relapse, and hypothesized a preoperative predictive score of complete gross resection (CGR).

Methodology Multicentric retrospective analysis including patients with recurrent EC (January-2010-December-2021). Multivariate analysis was performed to evaluate factors that could predict CGR. Each significant variable was assigned a 'predictive score'. The total predictive score of all patients was calculated and the corresponding CGR rate determined. The score was then validated using an additional small internal population.

Results Two-hundred-forty-three patients (331 (73%) were evaluated to undergo surgery. Of them, 186 (56%) received SCS, while 17.2% underwent diagnostic laparoscopy. At multivariate analysis, age<65 (OR 2.530, p=0.025), single-site relapse (OR 3.140, p=0.006), lymph-node (OR 4.363, p=0.004) and parenchymal relapse (OR 5.689, p=0.021) were confirmed as positive predictors for CGR. A value of 1 has been assigned to each significant variable. The sum formed the overall predictive risk score, which ranged between 0-3. An increasing rate in CGR was recorded going from score 0 to 3 (CGR score0 vs 3; 3.3.3.3% vs 93.3%) (figure 1). A cut-off of 2 (0–1 versus 2–3) was identified according to the Youden-Index, obtaining a sensitivity=64.6%, specificity=75.4%, accuracy=67.5%, positive predictive value=87.8% and negative predictive value=43.8%. The same trend was confirmed in the validation population (figure 1).

Conclusion Age<65 years, single-site relapse, nodal and parenchymal pathways were positive predictors of CGR. According to our score, an additional 20% of patients with a score ≥ 2 would have been candidates for surgery with a probability of CGR above 80%. For patients with score 1, examination under anesthesia and/or diagnostic laparoscopy could be considered as useful tools to complete surgical feasibility assessment.

Abstract #826 Figure 1

Disclosures None