Timeliness and Completeness of Endometrial Cancer Pathology Reports Before and After the FIGO 2023 Endometrial Cancer Staging Guidelines Update

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Introduction: Uterine cancer is the most common gynecologic malignancy among women in the United States with an estimated 66,200 new cases and 13,030 deaths in 2023.1 These cancers are divided into endometrial adenocarcinomas (EAC) and uterine sarcomas. In 2013, the Cancer Genome Atlas (TCGA) proposed four new molecular classifications based on genome and exome sequencing of EACs including POLE-mutant, mismatch repair deficiency (MMRd), p53 abnormal, and no specific molecular profile (NSMP).4 In June of 2023, the International Federation of Gynecology and Obstetrics (FIGO) published an updated staging system for uterine cancer to incorporate these molecular indices along with the traditional anatomical distribution of disease and histology used in older FIGO staging guidelines.5
The primary objective of this project was to analyze the timeliness and completeness of pathology reports and IHC staining of patients who underwent hysterectomies for uterine cancer at Detroit Medical Center from October 2022 – December 2023.

Methods: Patients were identified from the list of patients presented at the Karmanos Cancer Insitute's (KCI) Gynecologic Oncology Tumor Board. Given the June publication timing of the FIGO 2023 staging guidelines, this served as the intervention for the study. The pre-intervention group consists of surgical cases from October 2022 through June 2023, and the post-intervention group consists of cases from July 2023-December 2023. Differences in time from surgery to pathology report, surgery to IHC result, pathology report to IHC result as well as completeness of IHC results were compared pre- and post-intervention. Because neither group was normally distributed, a MannWhitney-U test was used to calculate P-value. IHC result completeness pre- and post-intervention was calculated using a Fisher exact test.

Results: A total of 106 cases were included, of which 67 were preintervention (63%) and 39 were postintervention. The median number of days from surgery to final pathology report was statistically significant (p=0.003) between the groups. The median number of days from pathology report to IHC result was not a statistically significant difference (p=0.19). The median number of days from surgery to completed IHC also not statistically significant. In terms of IHC staining, there was a statistically significant difference in the number of specimens pre- and post-intervention for p53 (p=0.004) and HER2 (p=0.04). There was no change in the MMR and MSI testing between the two groups.

Conclusions: Following the implementation of the FIGO 2023 staging guidelines in June of 2023, there was a significant decrease in the time from surgery to finalized pathology report and a significant change in the completeness of staining for p53 and HER2 on hysterectomy specimens. By finalizing the results of both pathology and IHC for endometrial cancer specimens in a timelier manner, patients can be informed of their diagnosis sooner. Additionally, with a complete pathologic and molecular diagnosis, our gynecologic oncologists can also more efficiently and effectively communicate within a multidisciplinary team of providers including radiation oncology and genetic counseling colleagues to formulate a treatment plan.