#226 EXPLORING THE ASSOCIATION BETWEEN DIFFERENT MISMATCH REPAIR DEFICIENT PHENOTYPES AND PROGNOSTIC FACTORS IN ENDOMETRIAL CANCER: A DESCRIPTIVE ANALYSIS
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Introduction/Background Mismatch repair deficiency (MMRd) accounts for 20–30% of all endometrial cancers (EC). MMRd ECs are characterized by the loss of at least one of the MMR proteins (MLH1/PM2/MSH2/MSH6) at immunohistochemistry (IHC), with MLH1-PM2 and MSH2-MSH6 loss occurring mostly as heterodimers. The MMRd group has been associated with a good-intermediate prognosis. However, the value of the different MMR loss patterns has not been explored. We aim at characterizing how MMRd protein expression patterns are associated with clinicopathological data.

Methodology Clinicopathological data from surgically staged EC patients have been retrospectively collected, with MMR status/p53 mutational status/estrogen receptors status (ER)/progesterone receptors status (PR) being evaluated by IHC. The population was divided into three cohorts: loss of MLH1, PMS2 or both (MLH1/PMS2 group); loss of MSH2, MSH6 or both (MSH2/MSH6 group); positive IHC staining for MLH1, PMS2, MSH2 and MSH6 (MMR-proficient group, MMRp).

Results Data from 1451 EC patients were analyzed. We identified 1075 cases (74.1%) with MMRp EC, and 376 (25.9%) with MMRd EC. Among the latter group, we observed 314 (21.6%) patients with MLH1, or PMS2, or both (MLH1/PMS2 group); loss of MSH2, MSH6, or for both proteins (MSH2/MSH6 group). The MLH1/PMS2 cohort was older (p<0.001), with a higher BMI (p<0.001) and a trend toward a higher presence of nodal involvement (p=0.05) compared to MSH2/MSH6 patients. MSH2/MSH6 patients displayed a higher concurrent p53 mutational rate (p=0.016). When compared with the group of MMRp, MLH1/PMS2 had an increased rate of FIGO stage IIIC1 and IIIC2 (p=0.001), nodal involvement (p<0.001), lymphovascular space invasion (p=0.007), deeper myometrial invasion (p=0.002), and larger tumor dimensions (p=0.002). For the same pathological features between the MSH2/MSH6 and MMRp groups, no difference was detected. Conclusion The MMRd MLH1/PMS2 pattern is associated to higher risk clinicopathological features compared to the MHS2/MSH6 counterpart.

Disclosures None

#231 ROLE OF SELECTIVE SENTINEL NODE-NEGATIVE BIOPSY IN CASES OF DISCORDANCE BETWEEN PRESURGICAL STAGING AND END-STAGE IN INTERMEDIATE-, INTERMEDIATE-HIGH, AND HIGH-RISK ENDOMETRIAL CANCER IN EARLY STAGES AND THE IMPACT ON LONG-TERM
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Introduction/Background To look at the negative predictive value (NPV) of selective sentinel node biopsy (SLNB) and to assess the impact of negative SLNB on long-term total survival (OS) and disease-free survival (DFS) in cases with discordance in preoperative staging.

Methodology Retrospective longitudinal observational study. 80 patients with endometrial adenocarcinoma (EC) in early stages with intermediate, intermediate-high and high risk (ESGO/ESTRUS/ESP guidelines) were revised, from March 2010 to January 2023. SLNB was performed in 10 discordant cases with low risk in preoperative study. Pelvic and paraaortic lymphadenectomy (LND) was performed in 50 cases and SLNB and LND in 20 cases. NPV of the SLNB was analyzed when SLNB and LND were performed at the same time. The impact of negative SLNB on survival was analyzed by comparing the group with negative SLNB (21 cases) and the group of systematic LND, positive or non-localized SLNB (59 cases) (Keplein Mayer and Cox regression).

Results The final staging revealed a discordance of 17.1% in pathology, of 27.5% in the estimate of myometrial invasion (MRI) and of 24.1% in lymph node involvement (MRI & CT). A mean of 24 (SD 9.2) pelvic nodes and 22.8 (SD 10.3) aortic lymph nodes (MRI) and of 24.1% in lymph node involvement (MRI). The impact of negative SLNB on survival was analyzed by comparing the group with negative SLNB (21 cases) and the group of systematic LND, positive or non-localized SLNB (59 cases) (Keplein Mayer and Cox regression).