active at that time. 23 out 95 (24%) patients that fulfilled the questionnaires in the follow-up reported engaging in sexual activity 6 months after treatment. These women demonstrated a slight improvement in the overall FSFI score (21.291 to 24.335, p: 0.124), being pain the sphere that significantly improved after treatments (2.887 to 4.155, p: 0.033)

Conclusion There are several factors that may impact women’s sexual health after the diagnosis and treatment of gynecological cancer. As there a minimal data on psychossexual side effects, it is important to consider these issues when offering treatment options and weighing their potential effects.

Disclosures No financial conflict of interest were reported.

11. Translational Research/Biomarkers

E-CADHERIN MODULATES CERVICAL CANCER PROGRESSION BY REGULATING EMT PROGRESSION VIA THE EGFR SIGNALING PATHWAY

Introduction/Background The expression of E-cadherin, a crucial cell adhesion molecule, is associated with epithelial-to-mesenchymal transition (EMT) process, which plays a significant role in the progression of various malignancies. However, the role of E-cadherin in cervical cancer has not been elucidated yet. Therefore, this study aimed to investigate the expression of E-cadherin in cervical cancer patients and its association with the pERK signaling pathway.

Methodology Immunohistochemical analyses of E-cadherin and pERK were performed using tissue microarray analysis of cervical cancer and normal cervical epitheliums and compared the pathological variables. Also the functional studies with cervical cancer cell lines were evaluated.

Results The expression of E-cadherin was significantly reduced from normal to cancer (p<0.001), and associated with FIGO stage (p<0.001). Furthermore, E-cadherin expression was negatively correlated with pERK expression in cervical neoplasia specimens (Spearman’s rho=-0.121, p=0.009). The Kaplan-Meier plots demonstrated that E-cadherin low expression was associated with poor DFS and OS (Both p<0.001, respectively). In case of pERK, the over expression was significantly associated with poor DFS and OS (Both p<0.001, respectively). The DFS and OS with expression of low E-cadherin/high pERK was compared with patients with others by Kaplan-Meier plot. It revealed a significant difference in disease free and overall survival (p<0.001 and p<0.001, respectively) The Cox proportional hazards model revealed that a combination of low E-cadherin/high pERK expression was an independent prognostic factor with respect to overall survival (Hazard ratio=8.48 [95% CI, 3.36 – 21.37, p<0.01]. In cervical cancer cell lines, the knock down of E-cadherins promoted proliferation in cervical cancer cells and loss of E-cadherin led to EGFR mobility, which may stimulate EGFR dimerization and further boost its activation.

Conclusion Low expression of E-cadherin or combined with pERK is an indicator of poor prognosis in cervical cancer, suggesting their potential utility as prognostic test in clinical assessment.

Disclosures There is no disclosure