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ENDOMETRIAL CANCER PROGNOSIS IN WOMEN WITH ENDOMETRIOSIS AND ADENOMYOSIS. A RETROSPECTIVE NATIONWIDE COHORT STUDY OF 40,847 WOMEN.

ORAL FEATURED POSTERS

Lecture Title:

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Objectives: The effect of endometriosis/adenomyosis on the prognosis of its related endometrial cancer remains unclear. Therefore, we aim to compare endometrial cancer survival in women with or without histological proven endometriosis or adenomyosis.

Methods: Women with endometrial cancer between 1990-2015 were identified from the Netherlands Cancer Registry (NCR). This data was linked to the Dutch pathology database (PALGA) to select all women with histological proven endometriosis or adenomyosis. Overall survival was compared between women with endometrial cancer with or without endometriosis/adenomyosis. We used multivariable Cox proportional hazard analysis to estimate hazard ratios (HRs) with 95% confidence intervals (CI).

Results: We included 1,708 women with endometrial cancer and endometriosis/adenomyosis and 39,139 women without endometriosis/adenomyosis. Women in the endometriosis/adenomyosis cohort were younger at endometrial cancer diagnosis, had earlier disease stage and more often had endometrioid endometrial cancer with low grade tumors. The 5-year survival rate in the endometriosis/adenomyosis cohort was 84.8% (95%CI 84.6-88.1) and 71.6% (95%CI 71.1-72.0) in the control cohort, p<0.0005. Univariate analysis resulted in a crude HR for overall survival of 0.63 (95%CI 0.59-0.69). Significant confounding factors are reported in table 1. Correction for these confounders resulted in a HR of 0.98

(95%Cl 0.90-1.06), p=0.867 (table1). Table 1 Hazard ratios of overall survival among women with endometrial cancer in univariate and multivariate analysis (n=35,549).

	Univariate analysis Hazard Ratio (95% CI)	Multivariate analysis Hazard Ratio (95% CI)
Endometriosis/adenomyosis	0.63 (0.59-0.69)*	0.98 (0.90-1.06)*
Age	1.09 (1.08-1.09) ^b	1.08 (1.08-1.08) ^b
Endometrial cancer stage*		
Stage 1	1.00 (ref)	1.00 (ref)
Stage 2	1.64 (1.56-1.72) ^b	1.40 (1.33-1.47) ^b
Stage 3	2.69 (2.57-2.81)*	2.31 (2.20-2.42)*
Stage 4	7.38 (6.98-7.80)*	4.23 (3.95-4.52)*
Histological tumor type		
Endometrioid	1.00 (ref)	1.00 (ref)
Clear cell	2.12 (1.91-2.37)*	1.10 (0.98-1.23)*
Serous	3.13 (2.89-3.38)*	1.25 (1.14-1.36)*
Mucinous	1.28 (1.10-1.48) ²	1.04 (0.90-1.21) ^b
Adenocarcinoma NOS	1.29 (1.25-1.33) ^b	1.20 (1.16-1.24) ^b
Histological grading*		
Low	1.00 (ref)	1.00 (ref)
Intermediate	1.48 (1.43-1.53)*	1.21 (1.17-1.25)*
High	2.65 (2.56-2.76)*	1.71 (1.64-1.78)*
Surgery	0.14 (0.13-0.15) ^b	0.39 (0.36-0.41)*
Chemotherapy	2.56 (2.39-2.75)*	1.22 (1.12-1.32)*

Only significant factors in univariate analysis are displayed.

NOS = not otherwise specified.

*p-value < 0.0005 for categorical factor in univariable and multivariable analyses. *p-value<0.0005. *pvalue not statistically significant.

Conclusions: Women with endometrial cancer and histologically proven endometriosis/adenomyosis have a better overall survival when compared to women with endometrial cancer without endometriosis/adenomyosis. This better survival is correlated to stage, grade, age, and histology, but not to the presence of endometriosis/adenomyosis.