

Poster 7: Association of Time to Surgery and Rates of Endometrial Cancer in Patients with Endometrial Intraepithelial Neoplasia

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Topic: Endometrial

Objectives

This study aims to determine the association between timing from diagnosis of endometrial intraepithelial neoplasia (EIN) to surgery and rates of concurrent endometrial cancer (EC).

Methods

A retrospective cohort study was conducted on women diagnosed with EIN on endometrial sampling who underwent hysterectomy from 2017 to 2023. Women with progestin use prior to surgery were excluded. Baseline patient demographics, pathology, surgeon specialty, and clinical outcomes were collected. Chi-squared tests and logistic regression were used to compare categorical variables, along with the Mann-Whitney U test to compare median time intervals from EIN diagnosis to surgery.

Results

116 patients met criteria with a median age of 58 and a median time to surgery of 56 days. Gynecologists performed 94% of index biopsies, however gynecologic oncologists performed 78% of the hysterectomies. 52 patients (44.8%) had EC diagnosed on hysterectomy, with 98% stage IA, 94% grade 1 tumors, 4% with LVSI, and 10% meeting Mayo criteria. Concurrent EC was identified in 35% of patients undergoing surgery within four weeks of diagnosis, 56% between 4-8 weeks, 21% between 8-12 weeks, and 50% beyond 12 weeks. No significant difference in EC rates was observed across various time intervals from biopsy to surgery (< 30 days, < 60 days, and < 90 days) or as a continuous variable ($p=0.38$). Among obese women, 54% had concurrent EC vs 37% for non-obese ($p=0.073$) and 61% underwent endometrial biopsy (EMB) vs 45% for non-obese ($p=0.086$). Women undergoing hysteroscopy (HSC) had lower rates of concurrent EC compared to those undergoing EMB, with rates of 31% vs. 56%, respectively; OR 0.33 (95% CI 0.16-0.71). Median time to surgery after EMB was 50 days vs 65.5 days for HSC ($p=0.042$).

Conclusions

Timing of EIN diagnosis to surgery was not associated with upstaging of disease. The method of biopsy and BMI, however, were more predictive of concurrent EC. Women undergoing EMB had a shorter time interval to surgery, however had higher rates of concurrent EC at time of surgery compared to those undergoing HSC. These findings underscore the complexity of factors influencing the progression of EIN to concurrent EC and suggest a potentially important role of HSC in the management of EIN. Additional investigation is warranted to further explore the optimal timing and management of EIN patients.

Abstract Table or Graph



Table 2: Rates of Concurrent Endometrial Cancer			
	Endometrial Cancer (n = 52), n (%)	EIN*/Benign Pathology (n = 64), n (%)	p value
Age			0.26
≤50	19 (37%)	15 (24%)	
51-64	23 (44%)	31 (48%)	
≥65	10 (19%)	18 (28%)	
Race			0.169†
White	38 (73%)	45 (70%)	
Black	4 (8%)	11 (17%)	
Asian	6 (11%)	6 (10%)	
Other	4 (8%)	2 (3%)	
Obesity‡			0.073
Yes	29 (56%)	25 (39%)	
No	23 (44%)	39 (61%)	
Biopsy method			0.004
Endometrial Biopsy	35 (67%)	26 (41%)	
Hysteroscopic Dilation and Curettage	17 (33%)	38 (59%)	
Days between diagnosis of EIN to surgery			0.38
0-4 weeks/0-29 days	7 (13%)	13 (20%)	
4-8 weeks/30-59 days	24 (46%)	19 (30%)	
8-12 weeks/60-89 days	4 (8%)	15 (23%)	
>12 weeks/>90 days	17 (33%)	17 (27%)	
*, EIN: Endometrial Intraepithelial Neoplasia			
†, p-Value reflects Black vs White only			
‡, Obesity defined as BMI ≥ 30			