

endometriosis, which demonstrates unequivocal invasion of surrounding tissues, may be more appropriately considered a neoplasm than a benign condition and review the latest treatment algorithm

Result(s)* Three recent studies demonstrated commonly occurring epithelial mutations in PIK3CA and ARID1A in endometriosis that are uniquely shared with clear cell and endometrioid ovarian epithelial cancers. The cytochrome P450 enzyme CYP1B1 convert estrogens to 4-hydroxy-catechol estrogens and, eventually, their depurinating quinone metabolites that cause DNA adducts leading to mutagenic apurinic sites. This would lead to accumulation of additional mutations during epithelial cell division. The estimated rate of malignant transformation for endometriosis is close to 1%, and recent results suggest that the presence of driver mutations alone is neither sufficient to drive the transformation of endometriosis nor indicative of likely progression to cancer.

Conclusion* : Massive concentrations of estrogen in the ovary may exert a direct genotoxic effect on DNA of ectopic endometrial (endometriotic) epithelial cells. Endometriosis is widely considered to be a benign disorder both clinically and a histopathologically. Well-known cancer-associated somatic mutations were found in the glandular epithelium of some deep infiltrating endometriosis lesions. These are exciting findings that share new light on all forms of endometriosis and their association with endometrial cancer.

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EXPERIENCE IN SELECTIVE LYMPH NODE BIOPSY USING ICG IN ENDOMETRIAL CANCER

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Introduction/Background* The objective of this study is to describe the results of patients with endometrial adenocarcinoma in early stages, which have undergone a selective sentinel lymphatic node biopsy (SLNB).

Methodology Retrospective observational descriptive study of patients with endometrial cancer treated by robotic surgery with Da Vinci Xi who underwent SLNB by Indocyanine green staining with ultrastratification using 5 sections separated by 200 microns. Study conducted from April 2019 to June 2020. We included 24 patients with early stages Endometrial adenocarcinoma. The technique for performing BSGC was by diluting 25 mg oc ICG in 5 ml of physiological serum and then 1 ml of this dilution in another 10 ml of serum. Subsequently we administered 1 ml of this solution in the cervix at 3 and 9 o'clock points by introducing a 21G needle, 1 cm deep into the cervix

Result(s)* The sample had a mean age of 61.3 years and a mean BMI of 28.6. In 2 of the cases (8%) the SN were positive even presenting myometrial infiltration <50% and in three of the cases (12.5%) the SN were not identified. SLNs were located in 98% of cases (n: 23) at the level of the obturator fossa and just in one case (2%) at the level of the external iliac artery and vein.

Conclusion* SLNB is an effective technique to assess lymphatic involvement due to adenocarcinoma of the endometrium in early stages.

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PREOPERATIVE CA125 SIGNIFICANTLY IMPROVES RISK STRATIFICATION IN HIGH-GRADE ENDOMETRIAL CANCER

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Introduction/Background* Patients with high-grade endometrial carcinoma (EC) have an increased risk of lymph node metastasis (LNM). Preoperative serum CA125 and imaging findings have been incorporated in multiple risk stratification models to predict LNM and advanced disease in EC and are widely used in clinical practice. However, data on their predictive value in high-grade EC are limited. We therefore aim to determine the predictive value of CA125 combined with preoperative computed tomography (CT) imaging in high-grade EC for LNM.

Methodology Retrospective multicentre cohort study including patients (n=334) with preoperative high-grade EC and available CA125. Clinical data including imaging results, primary surgical treatment and final International Federation of Gynecology and Obstetrics (FIGO) stage were recorded. CA125 was considered elevated at >35 IU/L.

Result(s)* Patients with high-grade EC (n=334) and elevated CA125 more often presented with advanced FIGO stage (III-IV), 64.2% (95/148) versus 18.8% (35/186) in patients

Abstract 466 Table 1 CA125 and CT results in relation to lymph node metastasis (N1) in patients who underwent surgical staging

	Total n=148	N0 n=107	N1 n=41
CA125 <35 U/mL, imaging not suspect for LNM	89	77 [86.5%]	12 [13.5%]
CA125 >35 U/mL, imaging not suspect for LNM	31	17 [54.8%]	14 [45.2%]
CA125 <35 U/mL, imaging suspect for LNM	9	8 [88.9%]	1 [11.1%]
CA125 >35 U/mL, imaging suspect for LNM	19	5 [26.3%]	14 [73.7%]

Abstract 466 Table 2 Logistic regression analysis of variables versus LNM

	Univariate analysis			Multivariate analysis		
	P value	Adjusted OR	95% CI	P value	Adjusted OR	95% CI
Age >65 years *	0.946	0.98	0.47 – 2.01	-	-	-
BMI >30 kg/m ² *	0.710	1.15	0.54 – 2.45	-	-	-
CA125 >35 U/mL	<0.001	8.322	3.71 – 18.67	<0.001	6.00	2.22– 16.25
Imaging suspected LNM	0.001	4.17	1.77 – 9.86	0.405	1.64	0.51– 5.27
MI >50%	<0.001	5.27	2.23 – 12.46	0.012	3.64	1.33– 10.01
Cervical involvement	<0.001	14.25	5.37 – 38.04	<0.001	9.57	3.09– 29.63

OR: odds ratio. CI: confidence interval for adjusted OR. * = not included for multivariate analysis.

with normal CA125 ($p < 0.05$). For patients with elevated CA125 who underwent surgical staging ($n = 192$), the prevalence of LNM was 56.5% (39/69), compared to 14.6% (18/123) in patients with normal CA125 ($p < 0.05$). For patients with preoperative CT imaging ($n = 148$), LNM were suspected in 18.9% (28/148), but histologically confirmed in 27.7% (41/148) of the patients. Preoperative CA125 and CT findings for LNM in relation to risk of LNM are shown in table 1.

Multivariate analysis (table 2) showed that elevated CA125, histological deep (>50%) myometrial invasion, and cervical involvement independently predict histological LNM ($p < 0.05$ for all) whereas positive CT findings for LNM did not.

Conclusion* This study demonstrates that elevated CA125 in patients with high-grade EC is an important prognostic marker for the predication of LNM and advanced stage disease. In patients with preoperative normal CA125, the additional value of CT imaging was limited with respect to the prediction of LNM. We therefore recommend to incorporate CA125 in routine preoperative work-up for risk stratification in high-grade EC.

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A PROSPECTIVE MULTICENTER NON-INFERIORITY TRIAL: ONCOLOGICAL SAFETY OF BIOPSY OF SENTINEL LYMPH NODE IN STAGE I ENDOMETRIOID ENDOMETRIAL CANCER

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Introduction/Background* In the primary treatment of stage I intermediate risk and high-intermediate risk endometrial cancer (EC) sentinel lymph node biopsy (SLN) can be considered for staging. Although there is no prospective trials for assessment the oncological outcome in these groups.

Study hypothesis we hypothesize that progression-free survival in women who underwent biopsy of mapping sentinel lymph node with indocyanine green will be not inferior compared to the patients in which systematic lymph nodes dissection will be performed.

Methodology Trial design: This prospective, randomized, non-inferiority study is to evaluate progression-free survival in patients with endometrioid EC with stage I from the intermediate and high-intermediate risk groups, who will have been performed SLN biopsy and systemic lymphadenectomy (pelvic and para-aortic lymph nodes dissection).

Inclusion criteria: 1. histological confirm endometrioid cancer of endometrium. 2. intermediate and high-intermediate risk (grade 1, grade 3 with $\geq 50\%$ myometrial invasion, grade 3 with $< 50\%$ myometrial invasion).

Exclusion criteria: 1. low risk (G1 with $< 50\%$ myometrial invasion), 2. other histological tumor variant except for endometrioid.

Result(s)* Primary endpoint: 1. Progression-free survival in patients with isolated tumor cells 2. Quality of life by EORTC QLQ-C30 and LYMQOL-Leg scales 3. 30-day post-surgery complications by Clavien-Dindo scale 4. overall survival rate which is defined from the moment of randomization to death (any cause); alive patients are analyzed after acquisition of the last information

Secondary endpoints: progression-free survival in patients with endometrioid stage I intermediate and high-intermediate risk endometrial cancer

Sample size: 430 patients for study cohort

Conclusion* Estimated Dates for Completing Accrual and Presenting Results : the study will be completed in 2023 with results in 2026

Trial Registration Number of local ethical protocol in Ukraine – №163 (23.06.20)

Disclosures Authors declare no disclosures.

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ENDOMETRIAL CANCER – THE SURGICAL TREATMENT IN THE HANDS OF RESIDENTS OF ONCOLOGICAL GYNAECOLOGY SUPERVISED BY SPECIALISTS

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Introduction/Background* Endometrial cancer is the most common of gynaecological malignant neoplasms in Europe and developed countries. Early diagnosis guarantees higher chances of recovery and the characteristics of this cancer allow us to treat it in a minimally invasive way which brings many benefits for the women.

This is the reason for such a big significance of excellent training in laparoscopic and robotic surgery amongst trainees in Gynaecological Oncology.

Methodology The patients with diagnosed endometrial cancer in FIGO stages I and II were sequentially assigned to two groups to gather 50 of each: laparoscopic and open surgery. The open procedures were performed by teams comprised of 2 doctors and the laparoscopic were performed by 3 doctors