Introduction/Background Studies on atypical endometrial hyperplasia (AEH) consistently reported high risk for the coexistence of endometrial cancer (EC) or progression to EC. On the other hand, the final diagnosis may turn out to be benign pathology (hyperplasia without atypia or normal endometrium) after hysterectomy for AEH. The purpose of this study was to determine the rates of under- and over-estimation compared to the final pathology after hysterectomy for AEH and to evaluate the predictive role of endometrial thickness

Methodology We retrospectively reviewed the medical records of 94 patients with AEH at two referral hospitals in Ankara between 2015 and 2020. 60 of them underwent a hysterectomy within 6 months after the index biopsy . Data were extracted for age, menopausal status, tamoxifen use and endometrial thickness . Of these 60 patients, 57 of whom we could reach the final pathology result were evaluated

Results Among patients who underwent hysterectomy due to a diagnosis of atypical hyperplasia, 23 cases (40,35%) were underestimated (cancer),11 cases (19,29%) were equivalent and 23 cases (40.35%) were overestimated .There was no difference among these groups in endometrial thickness by transvaginal ultrasonography .

Conclusion Diagnosis of atypical endometrial hyperplasia by endometrial biopsy may often resulted in under- or over-estimation. As there is neither a reliable clinical parameter nor imaging feature to distinguish between these groups, hysterectomy is still the best treatment option for these patients .

2022-RA-992-ESGO INCIDENCE AND THE CLINICAL CHARACTERISTICS OF ENDOMETRIAL CANCER IN END-BX PERFORMED WITH PIPELLE IN BREAST CANCER PATIENTS

[1]Funda Atalay, [2]Cemal Resat Atalay. *[1]Gynecologic Oncology Surgery, Dr.AY Ankara Oncology Education and Research Hospital, Ankara, Turkey; [2]Gynecology and Obstetrics, Ankara City Hospital (Ankara Numune Educational And Research Hospital), ANKARA, Turkey*

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Introduction/Background Endometrial cancer with a history of breast cancer (BC) is a specific condition. As compared to the general population, breast cancer survivors are at an increased risk of developing any secondary cancer with an excess risk of 30% . Endometrial cancer (EC), is the most frequently observed secondary malignancy among breast cancer patients. We aimed to investigate the incidence and the characteristics of EC in patients with previous breast cancer .

Methodology The records of 49 patients with previous history of BC and who underwent pipelle endometrial biopsy between 2015–2020 were evaluated retrospectively. Data were evaluated for age, menopausal status, tamoxifen use and endometrial thickness, surgery and the pathologic characteristics of endometrial cancer patients.

Results Among 49 endometrial biopsies, endometrial cancer was diagnosed in 10 (20.4%), atypical endometrial hyperplasia was diagnosed in 3 patients (6,12%), nonatypical endometrial hyperplsia in 8 (16,32%), endometrial polyp and normal hystology was noted in 28 patients (57,14%). Since 2 out of 10 patients diagnosed with endometrial cancer were operated in another center, we evaluated the data of 8 endometrial cancer cases..(40.1%). The characteristics of the patients who were diagnosed with endometrial cancer and underwent surgical staging are summarized in table 1.

Conclusion Abnormal uterine bleeding, increased endometrial thickness in BC patients treated with tamoxifen, found to be associated with the formation of endometrial cancer. Based on these findings, breast cancer patients receiving tamoxifen therapy, especially postmenopausal patients, should be followed closely and carefully evaluated when they have abnormal bleeding.

2022-RA-994-ESGO EVALUATION OF ONE STEP NUCLEIC ACID AMPLIFICATION (OSNA) METHOD FOR RAPID DETECTION OF LYMPH NODE METASTASES IN WOMEN WITH ENDOMETRIAL CANCER

[1]Eleonora La Fera, [1]Alessandro Petrecca, [1]Giorgia Monterossi, [2]Stefano Restaino, [1]Giovanni Scambia, [1]Francesco Fanfani. *[1]Department of Woman, Child and Public Health, Fondazione Policlinico Universitario A. Gemelli IRCCS, Rome, Italy; [2]Obstetrics, Gynecology and Pediatrics Department, Udine University Hospital, DAME, Udine, Italy*

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Introduction/Background The objective of this study is to establish the clinical performance of the One Step Nucleic Acid Amplification (OSNA) method for the detection of sentinel lymph node (SNL) metastases in women with early-stage endometrial cancer (EC) compared to standard Ultrastaging (US).

Abstract 2022-RA-992-ESGO Table 1 Clinical and surgical characteristics of patients with surgically staged endometrial cancer

Age	Menopausal status	Endometrial thickness mm	Surgical staging	Histology	Grade	MI	LVI	Cervical stromal invasion	Stage	TMX	TMX duration year
59	Postmenopausal	15	Yes	Endometrioid	1	<1/2	none	none	IA	No	
50	Postmenopausal	15	Yes	Endometrioid	2	<1/2	none	none	IA	Yes	7
60	Postmenopausal	6	Unknown							No	
61	Postmenopausal	7	Yes	Endometrioid	2	none	none	none	IA	Yes	5
53	Premenopausal	12	Yes	Endometrioid	3	<1/2	none	none	IA	Yes	2
60	Postmenopausa	11	Unknown							No	
50	Premenopausal	22	yes	Endometrioid	2	none	none	none	IA	Yes	5
73	Postmenopausal	10	Yes	Endometrioid	1	<1/2	none	none	IA	Yes	5
64	Postmenopausal	15	Yes	Endometrioid	2	<1/2	none	none	IA	No	
52	Postmenopausal	22	Yes	Endometrioid	2	none	none	none	IA	No	

Methodology This is a prospective, multicentric, observational study, women with early-stage EC underwent surgical staging with SNL identification. SNLs were serially sectioned at 2 mm slices thickness perpendicular to the longest axis of the node, the odd slices were submitted to ultra-staging, according to our institutional ultrastaging protocol, even slices were submitted to the OSNA analysis.

Results This is the largest study, until now, with three-hundred-and-sixteen patients enrolled with 668 SNLs analyzed with the two methods OSNA and US. OSNA assay detected 22 (3,3%) positive SNLs of which 17 (2,5%) micrometastases, and 5 (0,7%) macrometastases, whereas pathological ultrastaging detected 24 (3,6%) positive SNLs of which 15 (2,2%) micrometastases and 9 (1,3%) of macrometastases. In addition, OSNA detected 649 negative nodes (including 8 ITC), while Ultrastaging 644 negative nodes (with 26 ITC.) Using Ultrastaging as a reference method the specificity of 98,4%, the diagnostic accuracy of 96,7%, and the negative predictive value of 98,1% were attended. Discordant results were found in 22 SNLs (3,2%) corresponding to 20 patients (6,3%). We found 10 false-positive SNLs, all micrometastases, and 12 false-negative lymph nodes of which 9 micrometastases and 3 macrometastases.

Conclusion Although only portions of a whole lymph node have been examined with OSNA analysis, it has proved to be highly specific with high diagnostic accuracy, a high negative predictive value, and moderate concordance with the standard US. Therefore, we believe that OSNA is a valid method for analyzing lymph node metastases in patients with apparent early-stage EC, which allows us to analyze the entire lymph node with a standardized method.

2022-RA-995-ESGO INDEPENDENT PROGNOSTIC SIGNIFICANCE OF SUBSTANTIAL LYMPHOVASCULAR SPACE INVASION (LVSI) IN A CONSECUTIVE SERIES OF PRIMARY LVSI-POSITIVE ENDOMETRIAL CARCINOMA (EC)

[1]Stefan Kommoss, [1]Charlotte Meyer, [1]Marcel Grube, [1]Teresa Praetorius, [1]Sara Y Brucker, [1]Felix Neiss, [1]Bernhard Krämer, [1]Christina Barbara Walter, [2]Friedrich Kommoss, [3]Annette Staebler, [4]Blake Gilks, [4]Naveena Singh. *[1]Department of Women`s Health, Tübingen University Hospital, Tübingen, Germany; [2]Institute of Pathology, Im Medizin Campus Bodensee, Friedrichshafen, Germany; [3]Institute of Pathology, Tübingen University Hospital, Tübingen, Germany; [4]Department of Pathology and Laboratory Medicine, University of British Columbia, Vancouver, BC, Canada*

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Introduction/Background LVSI is known to be associated with unfavorable outcome in EC. Recent studies have shown that the extent of LVSI is one of the strongest prognosticators of local as well as distant recurrence after primary therapy. Therefore current risk-assessment algorithms, such as the ESGO-ESTRO-ESP consensus guidelines, require classification of LVSI as 'substantial' versus 'focal or negative' LVSI. It was the aim of this study to investigate the impact of LVSI quantification in a consecutive series of EC in which LVSI was found to be positive after routine pathology assessment.

Methodology EC patients treated at the Tuebingen University Women's Hospital between 2003 and 2016 were identified. Cases in which LVSI had been reported after routine pathology were independently reviewed by three experienced gynecopathologists according to current clinical practice (review of all tumor-containing H&E stained hysterectomy slides). The final LVSI classification was reached by a majority vote of the expert panel. DNA-sequencing for pathogenic POLE mutations and p53/MMR immunohistochemistry was performed on all cases.

Results After chart review of 770 cases, n=95 LVSI-positive cases were available for further research. LVSI was found to be substantial in 50/95(53%) cases. 5-yr disease-specific survival was 42% in cases with substantial LVSI and 74% in LVSI focal/negative cases. No prognostic impact was observed for molecular classification in this highly selected cohort. While established clinicopathological parameters were shown to be of prognostic significance in univariate analyses, LVSI quantification was shown to be the only independent prognosticator after multivariate analyses (HR 2,24;p=0,04).

Conclusion Our results support further LVSI quantification in EC found to be LVSI-positive upon routine pathology assessment. Patients with substantial LVSI are at high risk for relapse and fatal outcome. LVSI quantification may help to guide adjuvant treatment and might be of key importance for the development of new personalized EC treatment strategies.

2022-RA-997-ESGO LUNG RECURRENCE OF ENDOMETRIAL ADENOCARCINOMA: IMPACT OF MOLECULAR PROFILE AND ROLE OF LOCAL THERAPIES ON PROGNOSIS

[1]Ana Luzarraga, [1]Vicente Bebia, [2]Carlos Lopez-Gil, [3]Maria Pilar Montoya, [4]Alexandra Giraldo, [3]Alberto Jauregui, [4]Ramona Verges, [5]Josep Castellvi, [5]Angel Garcia-Jimenez, [2]Eva Colas, [6]Antonio Gil, [6]Silvia Cabrera. *[1]Gynecologic Oncology, Hospital Vall d'Hebron, Barcelona, Spain; [2]Vall d'Hebron Research Institute (VHIR), Barcelona, Spain; [3]Thoracic surgery, Hospital vall Hebron, Barcelona, Spain; [4]Radiation Oncology, Hospital vall Hebron, Barcelona, Spain; [5]Anatomy, Hospital vall Hebron, Barcelona, Spain; [6]Vall Hebron Hospital, Barcelona, Spain*

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Introduction/Background Endometrial cancer(EC) lung recurrence can be classified as multiple-site recurrence (affecting the lung and other organs) or isolated lung recurrence (affecting only the lung). Isolated lung recurrent patients may have the potential for long-term disease control and improved prognosis with local treatments: stereotactic body radiation therapy (SBRT) or metastasectomy.

Methodology This is a retrospective single-center study including consecutive women diagnosed with stage I-IVA EC at the Hospital Vall d'Hebron between 1995 and 2021 with first recurrence affecting the lung. Patients were classified as multiple-site metastatic or isolated lung recurrence, and these last according to the treatment received (local or systemic). We aimed to analyze local response rate and prognostic outcomes according to received treatment and the molecular classification (MC).

Results Isolated lung systemic-treated patients (n=15) were older (77 vs 69.7 years-old at relapse,p=0.43) and had more often bilateral (73.3%vs37.5%, p=0.008) and a higher number of metastases (p=0,001) than locally-treated patients (n=16). Of the locally-treated group, 5 were treated with