Conclusion With the overall detection rate of 87.2% (63.5% bilateral and 24.0% - unilateral) we find SLB ICG procedure feasible. Most frequently SLs were detected in the external iliac region. Age and extragenital pathology are the statistically significant factors associated with the failure of SLB procedure.

309 ROLE OF THREE-DIMENSIONAL TRANSVAGINAL ULTRASOUND AND DIFFUSION-WEIGHTED MAGNETIC RESONANCE IMAGING FOR ASSESSMENT OF MYOMETRICAL INVASION IN PATIENTS WITH LOW-RISK ENDOMETRIAL CANCER

1Núria Carreras Diéguez, 1Isabel Matas, 2Crisistian de Guior, 2Meritxell Mumlany, 1Pere Fusté, 3Núria Agustí, 1Ariel Glickman, 1Berta Díaz-Mejio, 1Jaume Pahisa, 1Aureli Torne, 1Hospital Clinic de Barcelona; Gynecologic Oncology Unit, 2Hospital Clinic de Barcelona; Gynecology and Obstetrics

10.1136/ijgc-2020-ESGO.67

Introduction/Background In patients with early-stage, grade 1–2, endometrioid endometrial cancer, preoperative assessment of myometrical invasion is essential to define the need of pelvic and paraaortic lymph node dissection. Our aim was to evaluate the role of three-dimensional transvaginal ultrasound (3D-TVUS) and diffusion-weighted magnetic resonance imaging (DW-RMI) for the assessment of myometrical invasion in patients with low-risk endometrial cancer.

Methodology We performed a single center retrospective study, including patients who underwent surgery for grade 1–2 endometrioid endometrial cancer, FIGO stage I-II, in Hospital Clinic de Barcelona between 2010 and 2019. We computed sensitivity, specificity, and predictive values of 3D-TVUS and DW-RMI, as well as of intraoperative frozen section pathological study of surgical specimen, for diagnosis of deep myometrial invasion (≥50%). Definitive pathological analysis of surgical specimen was considered gold standard for diagnosis of deep myometrial invasion.

Results One hundred and fifty-three patients were included, 120 (78.43%) patients presented myometrical invasion ≤50% in postoperative analysis of surgical specimen and 33 (21.57%) patients presented deep myometrial invasion. Sensitivity and specificity of 3D-TVUS for diagnosis of deep myometrial invasion was 68.8% and 80.5% respectively, while DW-RMI showed a sensitivity and specificity of 76.2% and 84.4%. When combining both techniques (we considered that a patient had deep myometrial invasion when 3D-TVUS or DW-RMI – or both of them – showed deep myometrial invasion), sensitivity was 93.1% and specificity was 68.4%. The proportion of patients with uterine fibroids was higher in the group of patients with false negative (60%) or false positive (39.13%) result in 3D-TVUS, although these results did not reach statistical significance. Regarding the intraoperative frozen section pathological study of surgical specimen, it showed a sensitivity of 75% with specificity of 96.4% for diagnosis of deep myometrial invasion.

Conclusion The combination of 3D-TVUS and DW-RMI offers a better sensitivity, higher than intraoperative frozen section pathological study of the surgical specimen, for the diagnosis of deep myometrial invasion in patients with early-stage, grade 1–2, endometrioid endometrial cancer. Such information may be useful in selecting patients who require lymph node dissection.

Disclosures No potential conflict of interest to declare.

345 CLINICAL PARAMETERS PREDICTING RISK OF CONCURRENT INVASIVE CARCINOMA AND HIGH-RISK CARCINOMA IN PATIENTS WITH ENDOMETRIAL INTRAEPITHELIAL NEOPLASIA

Nejat Ozgul1, Razieh Melike Yildirim1, Hulise Meltem Butur1, Utku Akgor2, Nejat Ozgul1, Murat Gultekin1, Mehmet Coskun Salmon1, 1Hacettepe University Faculty of Medicine; Department of Obstetrics and Gynaecology, 2Hacettepe University Faculty of Medicine; Department of Gynecological Oncology; Department of Obstetrics and Gynaecology

10.1136/ijgc-2020-ESGO.68

Introduction/Background Endometrial intraepithelial neoplasia (EIN) is a premalignant lesion, but risk of concurrent endometrial adenocarcinoma (EAC) is also high. Although most patients with EIN diagnosed with concurrent EAC will have low risk disease, some will have high-risk disease who require. Clinical characteristics may help determine such patients.

Methodology Patients with a diagnosis of EIN who were operated at Hacettepe University Faculty of Medicine, Department of Obstetrics and Gynaecology were identified. The rate of concurrent EAC and high-risk EAC were determined. Preoperative characteristics were reviewed in order to determine the predictors of concurrent malignancy.

Results A total of 232 patients constituted study group. Mean age was 46.6 years and 43.7% were postmenopausal. 44.0% had co-existing one or more medical diseases while 14.3% had diabetes, 19.5% had hypertension, and 7.5% had both. The most common surgery was total hysterectomy with or without adnexal removal performed in 93.6% of patients. Frozen section was requested for 82.5% of patients. Final pathology revealed EAC in 17.5%, but only 4.4% had high-risk disease. The accuracy of frozen section for predicting final pathology in terms of the presence or absence of EAC was 89.4%. Patient with malignancy tend to be significantly older (47.4 vs. 54.1 years, p=0.02) and risk of malignancy was significantly higher in postmenopausal women (9.2% vs 28.2%, p<0.001) and in women with hypertension (13.8% vs 32.7%, p=0.02). Similarly, patients with high-risk disease were significantly older (48.2 vs. 58.2 years, p=0.01) and this risk was higher in postmenopausal women (1.4% vs. 8.2%, p=0.01) and women with hypertension (3.0% vs. 10.2%, p=0.04).

Conclusion Surgery is the mainstay of treatment in patients with EIN. During surgery, frozen section evaluation should be requested since a significant proportion of patients have concurrent EAC and frozen section is highly effective in determining these patients. Although rare, some patients may have concurrent high-risk endometrial carcinoma necessitating surgical staging. Both concurrent invasive carcinoma and high-risk disease are associated with older age, being in postmenopausal period, and having hypertension.

Disclosures No potential conflict of interest to declare.

357 ENDOMETRIAL BIOPSIES: FOR WHOM AND WHEN?

1Bilal Esat Temiz, 1Esra Karatas, 1Utku Akgor, 1Murat Gultekin, 1Mehmet Coskun Salmon, 1Nejat Ozgul, 1Hacettepe University Hospital; Obstetrics and Gynaecology, 2Hacettepe University Faculty of Medicine; Department of Gynecological Oncology; Department of Obstetrics and Gynaecology, 2Hacettepe University Faculty of Medicine; Department of Obstetrics and Gynaecology

10.1136/ijgc-2020-ESGO.69

Int J Gynecol Cancer 2020;30(Suppl 4):A1–A142
Introduction/Background  To evaluate the role of transvaginal sonographic (tvUSG) endometrial thickness to detect endometrial cancers among postmenopausal women.

Methodology  Endometrial biopsy results of 1099 postmenopausal patients who have been evaluated at our hospital since 2015 are retrospectively collected. Age, symptoms (asymptomatic vs. postmenopausal bleeding-PMB), tvUSG endometrial thickness were the parameters to be collected. Patients with insufficient endometrial sampling were excluded (n = 103, 9.3%). Remaining study group (n=996) were divided into 5 groups according to their histopathological diagnosis: benign/physiological endometrium (group A), endometrial polyp (group B), endometrial hyperplasia or intraepithelial neoplasia (group C), endometrioid carcinoma (group D) and non-endometrioid carcinoma (group E). A scatter plot graph (figure 1) is prepared comparing the endometrial pathologies vs. tvUSG thickness.

Results  A total of 996 endometrial biopsies were evaluated (356 patients were asymptomatic, 640 patients presented with postmenopausal bleeding). The median age of the patients was 57.3 years. The cancer detection rate among patients with bleeding was 7.6% (49/640). This rate was 4.2% in asymptomatic patients (15/356). The comparison of the two groups is presented in table 1. High-grade cancers were detected three times more in symptomatic patients (75%, 15/20 vs. 25%, 5/20).

The mean endometrial thickness increases gradually from group A to group B: 8.3 for group A; and 12.1, 11.9, 18.7 and 16.0 mm for groups B, C, D, and E; respectively. In groups D and E, there were only 4 patients with an endometrial thickness of less than 5 mm (6.2%). Three patients were symptomatic and only one patient was asymptomatic.

A threshold of 5 mm can reveal 14/15 cancers in asymptomatic patients, while this figure is 12/15 for a 10 mm threshold and 6/15 for a threshold of 20 (figure 1). A threshold for 10 mm is reasonable for asymptomatic patients, missing 3 cancer patients (1 low grade, 2 high grade). In symptomatic patients, these figures were 46/49 for 5 mm threshold (3 missed cancer), 37/49 for a 10 mm threshold (12 missed cancer) and 21/49 for a 20 mm threshold (28 missed cancer).

Conclusion  Endometrial biopsy should be performed routinely in patients with postmenopausal bleeding due to high numbers of missed cancers. However, in asymptomatic patients, a biopsy can safely be ignored in patients with endometrial thickness of less than 5 mm. A biopsy may also be reserved for patients with an endometrial thickness > 10 mm (Cancer detection rate is 1.4% vs. 7.8%).

Disclosures  Nothing to declare.