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 myometrial 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 The authors of this abstract have no disclosures.

Results A total of 252 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.

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357 ENDOMETRIAL BIOPSIES: FOR WHOM AND WHEN?

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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 or 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