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Objectives: Endometrial thickness (ET) is an established screening tool to identify high-risk patients with postmenopausal bleeding (PMB) before invasive investigations to detect malignancy. Use of ET alone to select patients at increased risk of malignancy creates unnecessary invasive investigations. A modified International Endometrial Tumour Analysis (IETA) based principle is introduced in a one-stop PMB clinic, and clinical effectiveness is measured by comparing audits.

Methods: Two prospective audits were carried out before (74 patients) and after (50 patients) changes introduced on scanning. Clinicians seeing patients with PMB (one consultant gynecologist, two specialist nurses, one nurse consultant) recorded modified IETA criteria. The scanning improvements included endometrial (ET) or 'endometrial complex' thickness (ECT) or both, endometrial midline and echogenicity, endometrial/myometrial junction and blood flow, incorporated into the scan protocol.

Results: The initial audit found 34% preventable endometrial biopsy/hysteroscopy in patients with ET<4mm – this reduced to 11% post-implementation. With awareness of 'endometrial complex' and disrupted midline, patients with fluid/tissue distending the endometrial cavity are no longer incorrectly diagnosed as raised ET. Assessment of IETA features and ECT allowed hysteroscopy in fewer patients with raised ET alone compared with a greater proportion of the 'endometrial complex' group.

Conclusions: Introduction of modified IETA has reduced hysteroscopy and biopsy in PMB patients without compromising care. The audit itself has encouraged more comprehensive scanning and more patients per clinic. Further group learning is planned to improve additional clinical features such as endometrial/myometrial junction to reduce investigations such as MRI for low-grade endometrial cancers.

EP34: IMAGING IN ONCOLOGY

EP34.01
Ultrasound and 3D SPET/CT fusion to identify sentinel lymph nodes in vulvar cancer: a feasibility study

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Objectives: To evaluate the feasibility of Fusion of SPECT/CT and ultrasound in detecting sentinel lymph nodes in patients with vulvar cancer.

Methods: This is a prospective pilot monocentric study. Patients with vulvar cancer candidate for sentinel lymph node biopsy were enrolled between December 2018 and February 2019. Fusion virtual navigation of SPECT/CT and ultrasound was performed to investigate the tumour draining lymph node. All clinical, imaging, surgical and histological information were collected prospectively and entered into a dedicated Excel file. Feasibility, success of fusion virtual navigation and time needed to perform the three steps of Fusion were evaluated.

Results: Ten lymph node sites were evaluated. The fusion virtual navigation was feasible and successfully completed in all draining sites (10/10). The median overall time of fusion execution was 32 (range 25-40 min) minutes and the time spent for performing fusion decreased from the first to the last examination.

Conclusions: The present study demonstrated that the fusion virtual navigation using SPECT/CT and ultrasound is feasible and it is able to detect sentinel lymph nodes in patients with vulvar carcinoma. Fusion using ultrasound scan in detecting sentinel lymph node opens up to multiple diagnostic and therapeutic opportunities in gynecological oncology.

Supporting information can be found in the online version of this abstract

EP34.02
Clinical and ultrasound features of extra gastrointestinal stromal tumours (eGIST)

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Objectives: To describe the clinical and sonographic characteristics of extra-gastrointestinal stromal tumours (eGISTs).

Methods: This is a retrospective multicentric study. From the database of 9 large European gynecologic oncology centres we identified patients with a histological diagnosis of eGIST, who had undergone preoperative ultrasound. One author from each centre reviewed stored images and ultrasound reports, and described the lesions using IOTA and MUSA nomenclatures. In addition, clinical information, surgical and pathological reports were recorded.

Results: 35 women with eGISTs were identified, 17 incidental findings and 18 symptomatic cases. Median age was 57 years (range 21-85). Two patients (6%) had ascites and median CA 125 was 23 U/mL (range 7-403 U/mL). The vast majority of eGISTs were intraperitoneal lesions (33/35, 94%) with few retroperitoneally (2/35, 6%). The most common site was abdomen (23/35, 65.7%), and 12 lesions (34%) were in the pelvis. eGISTs were typically large (median of 79 mm) and solid tumors (31/35, 89%), the remaining eGISTs were multilocular-solid tumors (4/35, 11%). The tumour shape was mainly lobulated (20/35, 57%) or irregular (10/35, 29%). The echogenicity of solid tumours was less often uniform (8/35, 23%) but always hypoechogenic. More frequently solid tumours were non-uniform due to mixed echogenicity (13/27, 40%) or small irregular cysts (14/27, 37%). eGISTs were typically richly vascularised (colour score 3 and 4, 31/35, 89%) with no shadowing (31/35, 89%). Based on pattern recognition, eGISTs were usually correctly classified as malignant lesion (32/35, 91%) and the specific