Lisbon, Portugal; [4]Faculty of Health Sciences, University of Beira Interior, Covilhã, Portugal; [5]Surgical Sciences, Division of Maternal-Fetal Medicine, University of Cagliari, Cagliari, Italy

Objectives: To review clinical and imaging features of the ovarian collision tumours, i.e. histologically distinct neoplasms coexisting without histological intermixing.

Methods: Descriptive evaluation of 43 cases, including 6 our patients and 37 cases identified by PubMed search for original articles listed until May 2020.

Results: The patient median age was 50 (range 18–83 years). Abdominal pelvic pain represented the most frequent clinical manifestation (19/43 cases). Benign tumours coexisted in 26 patients (60,4%) while benign-malignant collisions occurred in 17 cases (39,6%), including a patient with benign-borderline tumour collision. Although ovarian tumours from all histological classes may collide, mature cystic teratoma (MCT) – epithelial lesion, whether benign (16/25) or malignant (9/25), was found to be the most common combination. Ultrasound, MRI and/or CT described all collisions as individual lesions. Unambiguous terminology for image description was used in 24 cases (including 4 unilocular, 8 multilocular, 3 unilocular-solid, 6 multilocular-solid and 3 solid formations). When MCT was present, mixed content and acoustic shadowing were observed. A MCT – primary carcinoid collision was classified as a benign formation by IOTA Simple Rules and by the ADNEX model when CA-125 level excluded. All other collisions containing a malignant component were preoperatively considered malignant as well as 2 benign collisions with multilocular-solid ultrasound morphology; however, validated prediction models were engaged only in our 6 patients.

Conclusions: Collision tumours in the ovary tend to be indistinguishable from individual lesions. Benign MCT features may obscure a coexisting malignancy while benign collisions may sonographically mimic malignant lesions. Histological recognition of such neoplasms should be accompanied by careful revision of the images, contributing to the identification of clues pointing toward a collision.

VP66.08

Clinical and ultrasound characteristics of neuroendocrine tumours of gynecologic tract

L. Quagliozzi[1], C. Iannantuono[1], F. Moro[1], F. Mascilini[1], F. Pozzati[1,2], F. Ciccarone[1], A. Biscione[1], G. Scambia[1,2], A.C. Testa[1,2]

[1]*Dipartimento Scienze della Salute della Donna, del Bambino e di Sanità Pubblica, Area Salute della Donna, Fondazione Policlinico Universitario Agostino Gemelli, IRCCS, Rome, Italy; [2]Dipartimento Scienze della Vita e Sanità Pubblica, Università Cattolica del Sacro Cuore, Rome, Italy*

Objectives: To identifying clinical and ultrasound features of neuroendocrine neoplasia (NEN) of the gynecologic tract.

Methods: Retrospective single centre study. Clinical and ultrasound characteristics of patients with histological diagnosis of NENs of the gynecologic tract from January 2015 to November 2019 were described. One author reviewed ultrasound images and described them using pattern recognition.

Results: 50 patients with NENs of the gynecologic tract were selected. The median age of patients was 52 (14-93) years. Thirty-nine (78%) were symptomatic and the most common clinical symptoms were vaginal bleeding (in 21/50, 54%) and pelvic pain (in 11/50, 28%). At ultrasound examination, most primary ovarian NEN appeared as unilateral (9/10, 90%), purely solid (8/10, 80%) with moderate or rich vascularisation (7/10, 70%). Most metastatic ovarian NENs were bilateral (10/15, 67%), purely solid (100%) with irregular margins (in 14/15, 93%) and richly vascularised (13/15, 87%). NENs of the cervix were most frequently hypoechoic solid tumour (7/15, 47%) with irregular margins in all cases and most of them were richly vascularised (9/15, 60%). NENs of the endometrium were hypoechoic solid mass in 3/8 (37%).All cases showed irregular margins and most of them (62%) minimal flow at Doppler examination. Retrospective analysis of available ultrasound images using pattern recognition revealed that in 90% of primary ovarian NENs anechoic areas were observed. About cervical NENs the typical image was a solid tumour presenting multiple hyperechoic spots. No typical ultrasound feature was observed for endometrial cancer.

Conclusions: At ultrasound examination, both primary ovarian NENs and metastatic NENS to the ovary appear as solid masses with irregular margins, and moderate or rich vascularisation. Cervical NENs appear as hypoechoic solid tumours, with irregular margins and highly vascularisation and endometrial NENs are solid hypoechoic tumours with irregular margins. A pattern recognition was identify only for ovarian and cervical NENs.

VP66.09

Clinical and ultrasound characteristics of vaginal pathology detected at ultrasound examination: a single centre prospective study

F. Pozzati[1,2], F. Moro[1], M. Leombroni[1], V. Bertoldo[1], I. Trivellizzi[1], F. Mascilini[1], G. Bolomini[1], G. Garganese[1,3], G. Scambia[1,2], A.C. Testa[1,2]

[1]*Dipartimento Scienze della Salute della Donna, del Bambino e di Sanità Pubblica, Area Salute della Donna, Fondazione Policlinico Universitario Agostino Gemelli, IRCCS, Rome, Italy; [2]Dipartimento Scienze della Vita e Sanità Pubblica, Università Cattolica del Sacro Cuore, Rome, Italy; [3]Gynecology and Breast Care Centre, Mater Olbia Hospital, Olbia, Italy*

Objectives: To describe clinical and ultrasound characteristics of vaginal lesions detected at ultrasound examination.

Methods: It is a single centre prospective observational study including patients with vaginal masses examined from January 2017 to May 2019. Lesions were classified as unilocular, multilocular, unilocular-solid, multilocular-solid, and solid. Patients were managed with ultrasound follow-up or surgical procedures (ultrasound-guided biopsy or surgical excision). For the analysis, patients were grouped in "malignant group" including patients with confirmed malignancy at final histology and "benign group" including patients with confirmed benign pathology and patients without histological diagnosis but with a lesion unchanged during follow-up.

Results: Forty-four patients were consecutively enrolled. 22/44 (50.0%) lesions were judged to be benign: 12/22 (54.5%) underwent ultrasound follow-up and did not show any change at 12 months, whereas 10/22 (45.5%) were submitted to surgical excision and the histology confirmed their benign nature. The remaining 22/44 (50.0%) lesions were classified as malignant at ultrasound examination and underwent surgery; the histology confirmed the suspicion in 20/22 (90.9%) cases. Vaginal masses in benign group resulted as follow: 11/24 (45.8%) unilocular, 3/24 (12.5%) multilocular and 10/24 (41.7%) solid. Malignant lesions were solid in 19/20 (95.0%) and multilocular solid in 1/20 (5.0%). 20/24 (83.4%) benign lesions were minimally/not vascularised at colour Doppler examination, while 18/20 (90.0%) malignant lesions had moderate/rich vascularisation.

Conclusions: The typical ultrasound image of benign lesion was unilocular cyst or solid mass with no or minimal vascularisation. Malignant lesions were described as solid tumour with irregular margins and moderate/rich vascularisation. Lesions judged to be benign at ultrasound did not show any change during the follow-up period. Ultrasound should be used to support the clinician in the management of vaginal lesions.