

were metastases. Sixty percent of the patients had normal levels of CA 125, measured after the lesions were detected by CDTV ultrasound study.

Conclusions: Although consensus about the benefits of transvaginal ultrasound as a screening procedure is not unanimous, our data suggest that tumours in patients screened with CDTV ultrasound are detected at earlier stages. Additional randomised studies are needed to support these findings.

EP23.34

Unilocular symptomatic cyst in a pregnant woman: what is the best approach?

A.D. Morais, S. de Melo Correia, A.G. Meira, A. Pereira Cunha, R. Santos

Gynecology and Obstetrics, Hospital da Senhora da Oliveira Guimaraes EPE, Guimaraes, Portugal

Unilocular cyst is a common ovarian ultrasound finding that can occur on fertile women. Due to the anatomical displacement alteration of the adnexal out of the pelvis, during pregnancy, the risk of ovarian torsion is higher when associated with a cyst.

The presented case involves a 33-year-old woman, 3G1P1A, with a spontaneous pregnancy and a last menstrual period (LMP) equivalent to ten weeks of gestation. She was admitted to our emergency department with an abdominal pain located in her right iliac region, lasting 1 day with no relief after home analgesia. Upon admission, the patient was stable, vital signs within the normal range. Abdominal examination revealed a mass located in the right iliac region associated with pain and defence. Transvaginal ultrasound revealed an intrauterine gestational sac with an embryo consistent with the LMP and fetal heartbeat. Upon analysing the adnexal areas, a 79x70x73mm unilocular cyst was detected in the right ovary, with anechoic content and a whirlpool sign, suggestive of sub-torsion of the right ovary. An ultrasound-guided fine needle aspiration was performed, resulting in the evacuation of 225cc serous fluid that was sent for cytological examination. Following the procedure, a vaginal ultrasound was repeated, revealing a cyst measuring 44x25x43mm. The patient experienced clear improvement of abdominal pain.

The aim of this paper is to demonstrate an alternative non-invasive procedure for unilocular cysts with ovary sub-torsion, which reduces the risk of miscarried.

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

EP23.35

External validation of the O-RADS lexicon and the IOTA two-step strategy to stratify tumours into O-RADS risk groups in a North American academic centre

M.M. Blanchette Porter

Obstetrics, Gynecology, and Reproductive Sciences, University of Vermont Robert Larner MD College of Medicine, Burlington, VT, USA

Objectives: To investigate the diagnostic performance of the O-RADS lexicon and the IOTA-2 step strategy in a North American Academic Network Hospital System.

Methods: Retrospective external diagnostic validation study based on data from one academic medical centre and three network community-based hospitals. A total of 205 adult patients presenting with an adnexal mass between January 1, 2014, and March 15, 2023, treated either conservatively, or with surgery, were included in this diagnostic study. Studies were excluded that did not meet predefined quality criteria.

Results: Median age of the 139 patients was 45 (IQR, 35-57 years). Of the observed ovarian lesions, 104 (74.8%) were benign, 15 (10.8%) were malignant, and 20 (14.5%) were uncertain classification. Applying the O-RADS lexicon resulted in a 1.42% observed prevalence of malignancy in O-RADS 2, 1.4% in O-RADS 3, 30% in O-RADS 4, and 75% in O-RADS 5. Two patients in O-RADS 3 had lesions which were observed due to severe surgical comorbidities with slow growth but no evidence of increasing classification up to 4 years following initial evaluation. The mean risk of malignancy generated by the ADNEX model without CA125 was significantly higher than in malignancy versus benign lesions for the academic medical centre (77.3% vs 4.6%), and for the three community-based hospitals (841% versus 15.9%).

Conclusions: The findings of this external diagnostic validation study suggest that both the O-RADS lexicon and the IOTA-2 step strategy can be utilised to stratify patients into risk groups. We confirm the observed malignancy rate is not below 1% as previously demonstrated for O-RADS 2. While the majority of the studies from the community-based hospitals met the predefined data quality criteria and the results of risk stratification were similar to the academic medical centre evaluation, more of these women required further imaging to further define the lesion.

EP23.36

Malignant transformation of a mature ovarian teratoma: case report

F. Magno¹, A. Coelho¹, F. Alpendre¹, P. Ambrósio^{1,2}, D. Djokovic^{1,2}

¹Maternidade Dr. Alfredo da Costa, Unidade Local de Saude Sao Jose EPE, Lisbon, Portugal; ²Obstetrics and Gynecology, Universidade NOVA de Lisboa NOVA Medical School, Lisbon, Portugal

A 60-year-old woman with a clinical history of morbid obesity, arterial hypertension, dyslipidemia and coronary disease (polymedicated for these conditions) was referred to our ultrasound unit due to progressive hirsutism over the last 2 years, a slight increase in serum testosterone and a 4cm right adnexal mass evidenced by abdominal-pelvic CT. Transvaginal (see figure1) and abdominal ultrasound showed a solid formation in the right adnexal fossa, measuring 48 x 40 x 53mm, with irregular contours, heterogeneous echogenicity, regular lacunar spaces, acoustic shadowing and colour score 3. No ascites, peritoneal metastases or other relevant alterations were observed. The CA125 level was 10 U/mL. Using the IOTA ADNEX model, the determined risk of malignancy was 8.2%. The patient underwent an uneventful robotic hysterectomy with bilateral adnexectomy. Histopathological evaluation found that the solid neoplasm with cystic spaces was composed of mature tissues derived from ectoderm (skin and nervous tissue), mesoderm (adipose tissue, smooth muscle tissue and cartilage) and endoderm (gastrointestinal epithelium, salivary and thyroid glandular tissues). Furthermore, a component of thyroid tissue with areas of follicular hyperplasia was identified, in which a 2.4mm papillary thyroid microcarcinoma was documented. To our knowledge, malignant transformation of a mature ovarian teratoma is a rare condition usually consisting of squamous cell carcinoma. This communication provided the ultrasound features of such a lesion with malignant degeneration of the thyroid tissue component. Studying and reporting additional cases would be beneficial to better understand the pathogenesis, natural history, clinical and imaging aspects of the disease.

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