Methodology A novel algorithm, based on serum HE4, CA125 and patient's age as variables, has been developed using a training dataset. This algorithm was named Risk of Ovarian Cancer Kazan Index (ROCK-I). The validating group consisted of 227 consecutively operated premenopausal patients with pelvic mass out of which there were 193 cases of benign diseases, 27 cancers and 7 borderline ovarian tumors (BOT).
Results ROCK-I demonstrated two fold less false positive results than ROMA. Thus, in the validating dataset, there was a statistically significant superiority of ROCK-I over ROMA in the specificity (92.2% and 84.5% respectively, p=0.017). Meanwhile, the sensitivity of ROCK-I was also numerically higher in all the scenarios of discrimination (table 1). When the scenario of discrimination 'benign disease vs the joint group of EOC (all stages) together with BOT stage Ic2-III' was used, ROC-AUC of ROCK-I, ROMA and CA 125 were 0.988, 0.946 and 0.937 respectively (figure 1). The difference in ROC-AUC between ROCK-I and CA125 was statistically significant (p=0.01) while the difference between ROMA and CA125 was not (p=0.79).
Conclusion ROMA provides a suboptimal prediction, at least, in premenopausal patients. If a large independent validation shows similar or even slightly lower superiority of the novel ROCK-I over ROMA, it may provide a new basis of routine-use of HE4 in the preoperative assessment of premenopausal patients with pelvic mass.

2022-RA-1389-ESGO DIAGNOSTIC ACCURACY OF ULTRASOUND O-RADS FOR CLASSIFYING ADNEXAL MASS: SYSTEMATIC REVIEW AND META-ANALYSIS

[1]Julio Vara, [2]Isabel Brotóns, [2]Ana López-Picazo, [2]Enrique Chacón, [2]Nabil Manzour, [2]Juan González Canales, [2]Alba Etxeandia, [2]Lucía Pérez Alonso, [2]Felix Boria, [2]Teresa Castellanos, [3]M Ángela Pascual, [4]Stefano Guerriero, [5]Luis M Chiva, [2]Juan Luis Alcázar. *[1]Obstetrics And Gynaecology, Clínica Universidad de Navarra, Pamplona, Spain; [2]Clínica Universidad de Navarra, Pamplona, Spain; [3]Obstetrics, Gynecology and Reproduction., Institut Universitari Dexeus., Barcelona, Spain; [4]University of Cagliari, Cagliari, Italy; [5]Clínica Universidad de Navarra, Madrid, Spain*

10.1136/ijgc-2022-ESGO.174

Introduction/Background The objetive is evaluate the diagnostic accuracy of ultrasound O-RADS classification for discriminating bening from malignant adnexal masses.
Methodology A search was performed in *PubMed/MEDLINE*, *CINAHL*, *Scopus*, *Cochrane*, *ClinicalTrials.gov* and *Web of Science* databases (January 2018 to January 2022) for studies evaluating ultrasound O-RADS classification (index test) for discriminating benign from malignant adnexal masses, using histology or adequate follow-up as reference test. The Quality Assessment of Diagnostic Accuracy Studies-2 (QUADAS-2) tool was used to evaluate the quality of the studies. Pooled sensitivity, specificity, positive and negative likelihood ratios for detecting adnexal malignancy were calculated separately considering O-RADS groups 4 and 5 as suspicious for malignancy
Results The search identified 185 citations after excluding duplicates, papers not related to the topic, reviews and paper assessing MRI O-RADS and papers with no 2x2 tables available, six studies comprising 3063 adnexal masses in 3006 patients were ultimately included in the qualitative and quantitative syntheses. The mean prevalence of adnexal malignancy on surgery was 29% (range: (8% to 59%). All studies were retrospective and four of them were considered of high risk of bias in patient selection due to inadequate exclusions. All studies were considered as low risk of bias for index test, reference test and flow and timing. Overall, pooled sensitivity, specificity, positive and negative likelihood ratios and DOR for O-RADS classification were 97% (95%CI 93%-99%), 76% (95%CI 58%-87%), 4.0 (95%CI 2.2–7.3), 0.04 (95%CI 0.02-0.09) and 100 (95%CI 35–280). Heterogeneity as high for specificity and moderate for sensitivity. Meta- regression showed that neither sample size nor malignancy prevalence explained this heterogeneity.
Conclusion Ultrasound O-RADS classification offers a high sensitivity and moderate specificity for discriminating malignant from benign adnexal masses.

2022-RA-1400-ESGO GI-RADS VERSUS O-RADS AS CLASSIFICATION REPORTING SYSTEM FOR ADNEXAL MASSES. A PROSPECTIVE COMPARATIVE STUDY

[1]Julio Vara, [2]Isabel Brotóns, [2]Ana López-Picazo, [3]Celia Paredes, [4]Isabel María Aguilar, [2]Juan González Canales, [5]Patricia Forcada, [2]Alba Etxeandia, [6]Lucía Pérez Alonso, [6]Isabel Carriles, [2]Tania Errasti, [2]Begoña Olartecoechea, [7]Stefano Guerriero, [2]Álvaro Ruiz Zambrana, [8]M Angela Pascual, [6]Luis M Chiva, [2]Juan Luis Alcázar. *[1]Obstetrics And Gynaecology, Clínica Universidad de Navarra, Pamplona, Spain; [2]Clínica Universidad de Navarra, Pamplona, Spain; [3]Complejo Hospitalario Universitario de Badajoz, Badajoz, Spain; [4]Hospital Universitario de Valme, Sevilla, Spain; [5]Hospital General Universitario de Castellón, Castellón, Spain; [6]Clínica Universidad de Navarra, Madrid, Spain; [7]University of Cagliari, Cagliari, Italy; [8]Institut Universitari Dexeus, Barcelona, Spain*

10.1136/ijgc-2022-ESGO.175

Introduction/Background To compare GI-RADS and O-RADS reporting systems for managing adnexal masses.
Methodology Single center prospective study comprising a non-consecutive series of women diagnosing as having an adnexal mass evaluated and treated at our institution between January 2019 and December 2020. All women underwent transvaginal/transabdominal ultrasound examination. Pregnant women and girls under 18 years were not included. Adnexal masses were classified using GI-RADS system (based on subjective impression of the examiner). Management (follow-up, surgery by general gynecologist, MRI as second step technique or referral to Gynecologic oncologist) was based on this system. Additionally, O-RADS classification based on ADNEX model malignancy risk estimation (not using CA-125) was estimated. Diagnostic performance of both systems (considering GI-RADS or O-RADS 4 and 5 as malignant) were assessed and compared. Reference standard was or follow-up (masses with > 12 months and no signs of malignancy were considered as benign)
Results One hundred and ninety-eight women (240 masses) were included in the study. GI-RADS classifications of the masses were as follows: GI-RADS-2: 20, GI-RADS 3: 178, GI-RADS-4: 25 and GI-RADS- 5: 17. According to O-RADS, masses had been classified as follows: O-RADS-2: 28, O-RADS 3: 173, O- RADS-4: 25 and O-RADS-5: 14. 136 masses were managed conservatively and 104 were removed surgically. No mass on follow-up turned to be an ovarian cancer. Reference standard was benign in 217 masses and malignant in 23 masses. Diagnostic performance of both systems is shown in table.