

though we were unable to demonstrate fetal cardiac activity above MSD of 21 mm, given the consideration of intra and inter observer variability in obtaining USS parameters, it appears to be a safe option to adhere to the current cutoff of 25 mm to avoid any inadvertent interventions. Above 5 mm CRL there were no demonstrable fetal cardiac activity in subsequent scans suggests that inter and intra observer variability adjusted fetal pole cut off of 7 mm is the margin of choice to diagnose a miscarriage.

VP60.07

Management outcomes of Caesarean scar pregnancies

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Early diagnosis of Caesarean scar (CS) pregnancies provides opportunities for medical management to avoid significant maternal morbidity and mortality associated with rupture and surgery. We describe our experience in the conservative management of 8 CS pregnancies in an Australian tertiary centre. All cases had an ultrasound diagnosis with a mean gestational age of 7 weeks (range: 5+6–8+6) & mean serum β hCG of 17387IU/mL (1510–58081) with fetal heart activity present in 4 cases.

1 case received expectant management due to patient's request to continue with the pregnancy against medical advice. 5 cases received single dose systemic methotrexate (MTX), 1 case received both systemic MTX + intra-sac MTX Ultrasound-Guided Injection (USGI), and 1 case received intra-sac MTX USGI + potassium chloride (KCl) (table 1). Two cases required further management

with systemic methotrexate and intra-sac MTX USGI +KCl respectively. Overall, medical management was successful in 6 cases (85.7%). 1 case failed systemic MTX treatment and required surgical management due to suspected rupture with significant hemorrhage. The expectant case eventually proceeded with a surgical termination of pregnancy at 12⁺¹ weeks following vaginal bleeding. All USGI were performed transvaginally without complications. No hysterectomy, unplanned ICU admissions or unplanned return to OR, and mortality was observed. Subsequent successful pregnancy was observed in 2 cases. Overall, our experience supports the safe and effective utilisation of medical management in the treatment of CS pregnancies in selected patients.

VP61: MANAGING OVARIAN MASSES

VP61.01

MRI versus ultrasound expert evaluation for detecting malignancy in adnexal masses classified as inconclusive by IOTA Simple Rules

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VP60.07: Table 1. Management outcomes of Caesarean scar pregnancies

Patient	Gestational age	Fetal heart activity present	Initial β -hCG level	Primary management	Further management	Successful medical management	Hemorrhagic complications	Subsequent successful pregnancy observed
Case 1	7 weeks	Yes	17,770 IU/mL	Expectant	Surgical termination of pregnancy with laparotomy following onset of vaginal bleeding	-	No	No
Case 2	5 weeks + 6 days	Yes	23,974 IU/mL	Systemic MTX 50mg + Intra-sac MTX USGI 50mg	No	Yes	No	Yes
Case 3	6 weeks + 2 days	Yes	4,698 IU/mL	Systemic MTX at 50mg/m ²	Intra-sac MTX 20mg + KCl 10mmol USGI for rising β -hCG levels	Yes	No	No
Case 4	8 weeks + 6 days	Yes	58,081 IU/mL	Intra-sac MTX 50mg + KCl 10mmol USGI	Systemic MTX 50mg/m ² for stagnant β -hCG levels at 40-45 IU/mL	Yes	No	No
Case 5	7 weeks + 5 days	No	1,510 IU/mL	Systemic MTX at 50mg/m ²	No	Yes	No	No
Case 6	7 weeks + 3 days	No	17,834 IU/mL	Systemic MTX at 50mg/m ²	No	Yes	No	No
Case 7	6 weeks + 2 days	No	2,946 IU/mL	Systemic MTX at 50mg/m ²	No	Yes	No	No
Case 8	7 weeks	No	12,286 IU/mL	Systemic MTX at 50mg/m ²	Laparotomy for suspected rupture with heavy vaginal bleeding	No	Yes	Yes

Objectives: To compare diagnostic performance of MRI and ultrasound assessment performed by an expert examiner for discriminating benign from malignant masses classified as inconclusive by IOTA Simple Rules (SR).

Methods: This is an ongoing single centre prospective study performed between January 2018 and January 2020. All women with an adnexal mass classified as inconclusive according to IOTA SR by non-expert examiners were submitted to MRI and ultrasound expert evaluation. MRI assessment was done according to AdnexMR score by an expert radiologist. AdnexMR score 4 (indeterminate mass) was considered as malignant for analytical purposes. Ultrasound assessment as based on examiner's subjective impression (masses were classified as malignant, benign or indeterminate. Indeterminate mass was considered when the ultrasound examiner cannot provide a clear diagnosis (benign or malignant) with enough confidence). Reference standard was histology (patient was submitted to surgery if any of the tests was suspicious) or follow-up (Masses with ≥ 12 months and no signs of malignancy were considered as benign). Sensitivity, specificity, positive (PLR) and negative likelihood (NLR) ratios and accuracy were calculated. Sensitivity and specificity were compared using McNemar test.

Results: During study period 54 patients were recruited. Eleven masses were malignant and 43 masses were benign. Indeterminate cases by MRI and ultrasound were 13 (24.2%) and 3 (3.8%), respectively ($p < 0.01$). Sensitivity, specificity, PLR, NLR and accuracy for MRI were 100%, 72%, 3.6, 0.0 and 78%, respectively. Sensitivity, specificity, PLR, NLR and accuracy for ultrasound were 91%, 88%, 7.6, 0.1 and 94%, respectively. There was a trend to better specificity in terms of specificity ($p = 0.96$).

Conclusions: Albeit no statistical differences were detected ultrasound seems to be more specific and provide less indeterminate cases than MRI in inconclusive masses as determined by IOTA Simple Rules.

VP61.02

ROMA index versus ultrasound expert evaluation for detecting malignancy in adnexal masses classified as inconclusive by IOTA Simple Rules

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Objectives: To compare diagnostic performance of ROMA and ultrasound assessment performed by an expert examiner for discriminating benign from malignant masses classified as inconclusive by IOTA Simple Rules (SR).

Methods: This is an ongoing single centre prospective study performed between January 2018 and January 2020. All adnexal masses classified as inconclusive according to IOTA SR by non-expert examiners were submitted to ultrasound expert evaluation. Additionally, ROMA index was also calculated. Ultrasound assessment as based on examiner's subjective impression. Reference standard was histology (patient was submitted to surgery if any of the tests was suspicious) or follow-up (Masses with ≥ 12 months and no signs of malignancy were considered as benign). Sensitivity, specificity, positive (PLR) and negative likelihood (NLR) ratios and accuracy were calculated. Sensitivity and specificity were compared using McNemar test.

Results: During study period, 60 patients with sixty masses were recruited. Fifteen masses were malignant and 45 masses were benign. Sensitivity, specificity, PLR, NLR and accuracy for ROMA were 53%, 71%, 1.83, 0.66 and 67%, respectively. Sensitivity, specificity,

PLR, NLR and accuracy for ultrasound were 93.3%, 89%, 8.45, 0.08 and 90%, respectively. Ultrasound was more sensitive and specific than ROMA ($p < 0.01$).

Conclusions: Expert ultrasound assessment has a better diagnostic performance than ROMA index in inconclusive masses as determined by IOTA Simple Rules.

VP61.03

Evaluation of risk of malignancy index for preoperative diagnosis of ovarian cancer

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Objectives: To determine clinical role of risk malignancy index to differentiate between benign and malignant ovarian masses.

Methods: A prospective study was carried out in 40 women with ovarian mass in the Department of Gynecology, LTMMC, Maharashtra, India between February 2013 to October 2014. The profile of these patients was recorded in a predesigned proforma. Ultrasound, serum CA-125 level and menopausal scoring was done as a part of RMI calculation. Histopathology reports were later analysed for final correlation with ultrasound findings, serum CA-125 level and menopausal status separately and RMI-1 and RMI-2 in combination.

Results: Both RMI-1 and RMI-2 have shown the ability of correctly identifying both benign and malignant ovarian mass with the arc under the curve in ROC 93.2% for RMI-1 and 90.99% for RMI-2. Both RMI-1 and RMI-2 value were significantly higher in malignant neoplasm than benign. RMI-1 had the highest sensitivity and specificity at the cut-off point 200. With the cut off value of ≥ 200 used to diagnose malignant neoplasm, it had a sensitivity of 90.9%, specificity 94.4%, PPV 95.2% and NPV 89.5% in RMI-1 and sensitivity 90.9%, specificity 72.2%, PPV 80% and NPV 86.7% in RMI-2. Considering both RMI-1 and RMI-2 at the cut off value of 200, out of total 20 malignant cases, 2 cases of ovarian cancers were missed.

Conclusions: RMI is very useful in pre-operative diagnosis of ovarian malignancy. It overcomes the false positive result obtained while using a single parameter like serum CA-125 or USG alone.

VP61.04

Validating the implementation of IOTA terminology in a Danish tertiary gynecologic centre

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Objectives: To evaluate the application and reproducibility of the International Ovarian Tumor Analysis (IOTA) terms and definitions for classifying ovarian tumours at a Danish gynecologic tertiary centre.

Methods: From January to May 2020, patients ≥ 18 years were prospectively included at the Gynecologic Department, Rigshospitalet, Denmark. All gynecologists were offered the IOTA certification course. A template was developed in the EPIC system (electronic patient file) for a systematic description of lesions using the IOTA terms. The clinician's descriptions and stored ultrasound images were externally evaluated by two IOTA-certified, experienced ultrasound examiners, who were blinded to all clinical data. Chi-square test was used for comparison.