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not equivalent to minor levator trauma defined by MRI criteria. We recommend to use standard AIUM/IUGA criteria.

OC18.07: Table 1. The association of different categorisations of levator trauma with symptoms and signs of pelvic organ prolapse (n = 3877; lower numbers due to missing data for symptoms or signs)

	Symptoms of prolapse (yes/no)	*Prolapse on POPQ exam (yes/no)*	*Prolapse on US imaging (yes/no)*
Full avulsion	647/906 vs.1377/2970; P < 0.001 Odds Ratio 2.89 (CI 2.46-3.4)	833/906 vs. 2214/2967; P < 0.001 Odds Ratio 3.88 (CI 3.01-5.0)	753/906 vs. 1806/2969; P < 0.001 Odds Ratio 3.17 (CI 2.62-3.83)
Major levator trauma	658/926 vs.1366/2950; P < 0.001 Odds Ratio 2.84 (CI 2.43-3.34)	850/926 vs. 2197/2947; P < 0.001 Odds Ratio 3.82 (CI 2.98-4.9)	769/926 vs. 1790/2949; P < 0.001 Odds Ratio 3.17 (CI 2.63-3.82)

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

OC18.08

Is it useful to distinguish type I and type II avulsions?

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Objectives: Levator avulsion is a common observation in women with pelvic organ prolapse (POP). It was recently proposed that a distinction should be made between type I (hyperechoic 'connection' to sidewall) and type II avulsion (no such 'connection') (figure 1). We undertook a study to determine if it is useful to do so.

Methods: Archived data sets of 932 women who attended a urogynecological unit between 2/19 and 12/21 were analysed on a PC using the software 4D View. Images were scored for slices from the plane of minimal dimensions (Slice 3) to 1.25 cm above this plane (Slice 8). In addition, slices were assessed qualitatively to distinguish type I and type II avulsion. Primary outcome measures were symptoms and signs of POP.

Results: A test-retest series showed a kappa of 0.895 for standard tomographic diagnosis and 0.595 for distinction between types I and II. The former was possible in 929 and the latter in 924. We diagnosed 194 full avulsions (21%), 67 (7%) were bilateral. Type I avulsions were found in 136 (15%), type II in 52 (6%); such scoring was impossible in 6. Table I provides associations between symptoms and signs of POP and avulsion diagnosis.

Conclusions: Given that type II avulsion does not seem to convey any additional risk of symptoms and/ or signs of POP compared to type I, we advise against use of this distinction and recommend that levator muscle insertions be rated according to standard AUGS/ IUGA criteria.

OC18.08: Table 1. Association of avulsion types with symptoms and signs of prolapse (n = 929 and n = 924)

	Symptoms of prolapse (yes/no)	*Prolapse on POPQ exam (yes/no)*	*Prolapse on US imaging (yes/no)*
Unilateral avulsion	353/735 vs. 85/127 OR 2.06 (1.38-3.08) P < 0.001	560/734 vs. 116/127 OR 3.14 (1.65-5.96) P < 0.001	473/735 vs. 107/127 OR 2.83 (1.71-4.67) P < 0.001
Bilateral avulsion	353/735 vs. 55/67 OR 4.87 (2.56-9.25) P < 0.001	560/734 vs. 64/67 OR 6.52 (2.02-21.03) P = 0.002	473/735 vs. 58/67 OR 3.51 (1.71-7.2) P < 0.001
Type I avulsion	353/735 vs. 100/136 OR 3.01 (2-4.52) P < 0.001	560/734 vs. 127/136 OR 4.39 (2.18-8.8) P < 0.001	473/735 vs. 117/136 OR 3.41 (2.05-5.67) P < 0.001
Type II avulsion	353/735 vs. 34/52 OR 2.04 (1.13-3.69) P = 0.017	560/734 vs. 47/52 OR 2.92 (1.14-7.46) P = 0.025	473/735 vs. 42/52 OR 2.33 (1.15-4.71) P = 0.019

OR: Odds ratio, P: P value

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

OC19: PLENARY: TOP ABSTRACTS

OC19.01

Prediction of outcome in endometrial cancer improved by combining traditional with sonographic and demographic parameters: IETA4 cohort follow-up

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Objectives: To develop and validate pre- and postoperative mathematical models to predict recurrence/progression of endometrial cancer, and to evaluate if these models outperform the ESMO/ESGO/ESTRO prognostic risk groups.

Methods: All 1538 women in the prospective IETA4 cohort who underwent preoperative structured ultrasound examination followed by hysterectomy from 2011 to 2015, were followed up until 2019-2020 or to time of death. The ESMO/ESGO/ESTRO pre- and postoperative risk groups (based on myometrial invasion, grade, stage, LVSI) were forced into the respective model. Based on scientific knowledge we also included age, BMI, extrauterine tumour spread on ultrasound, colour score, multiple-multifocal vascular pattern, endometrial-myometrial border, endometrial echogenicity and tumour AP diameter as candidate variables. A multivariable fractional polynomial algorithm was run to fit a Fine-and-Gray competing risk model, with death from other causes as a competing event. Calibration plots were generated, and Harrell's C discrimination index was calculated.

Results: Follow-up data was complete in 1429/1538 (92.9%) patients. Recurrence/progression occurred in 228 (15.9%) and death from other causes in 121 (8.5%), 659 (46%) were low-risk. A preoperative model including the ESMO/ESGO/ESTRO preoperative risk group and the retained variables extrauterine spread on ultrasound, non-uniform echogenicity, age $\geq$65 years, and tumour AP diameter $\geq$ 2 cm was superior to ESMO/ESGO/ESTRO preoperative risk group alone, Harrell's C 0.761 (95% CI 0.727-0.795) vs. 0.706 (95% CI 0.674-0.739). The postoperative model including the retained variables age $\geq$ 65 years and tumour AP diameter $\geq$ 2 cm, improved Harrell's C from 0.758 (0.723-0.792) to 0.785 (0.754-0.816) compared to including only the 2020 postoperative ESMO/ESGO/ESTRO risks group.

Conclusions: Adding sonographic and demographic variables to the ESMO/ESGO/ESTRO prognostic groups improved risk prediction and may be valuable to further individualise patient management.

OC19.02
Changes in the intensity of symptoms suggestive of endometriosis over time in women without abnormal findings at initial ultrasound examination

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Objectives: Evaluate if changes in the intensity of dysmenorrhea and chronic pelvic pain at long-term follow-up in women without endometriosis findings at initial examination are associated with ultrasound findings of endometrioma, deep endometriosis (DE) or adenomyosis at follow-up.

Methods: Long-term follow-up at five years was performed in 100 women without endometriosis findings at initial ultrasound examination. Women reported symptoms suggestive of endometriosis using a standardised questionnaire and underwent transvaginal ultrasound examinations at the Ultrasound Unit, Department of Obstetrics and Gynecology, Skåne University Hospital, Malmö, Sweden. Severity of symptoms was assessed using visual analogue scale (VAS) from 0 to 100 mm, 71-100 mm was considered severe. Alterations of 10 mm was used as cut-off for minimal clinical important difference to assess if intensity of the symptom reduced, increased or remained unchanged at follow-up.

Results: At follow-up, 13 women (13%) had signs of endometrioma, DE or adenomyosis, while 87 women (87%) had no ultrasound findings of endometrioma, DE or adenomyosis. Increased intensity of dysmenorrhea was less common in women with ultrasound findings endometriomas, DE or adenomyosis than in women without lesions (0% vs. 37%, $p = 0.008$). Hormonal treatment was equally frequent in both groups (50% vs. 54%, $p = 0.766$). Reduced intensity of dysmenorrhea was more common in women without ultrasound findings of endometrioma, DE or adenomyosis who began hormonal treatment compared to women who quit hormonal treatment during follow-up (75% vs. 38%, $p = 0.041$). Fewer women with ultrasound findings of endometrioma, deep endometriosis or adenomyosis reported severe chronic pelvic pain at follow-up compared to women without (0% vs. 24%, $p = 0.046$).

Conclusions: Ultrasound findings of endometrioma, DE or adenomyosis were not associated with increased intensity of dysmenorrhea or chronic pelvic pain at long-term follow-up. Hormonal treatment reduced severity of dysmenorrhea, although not chronic pelvic pain.

OC19.03
Growth restriction at term: angiogenic factors versus Doppler (GRAFD trial)

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Objectives: To demonstrate if a management protocol based on angiogenic factors is non-inferior to Doppler criteria to prevent perinatal complications in small fetuses.

Methods: This is a multicentre, randomised, open-label, clinical trial conducted in 20 maternity hospitals across Spain between 2019 and 2022. Pregnancies with estimated fetal weight (EFW) $\leq$10th percentile between 36 and 37^{+6} weeks of gestation were recruited and randomly assigned to the control group (management based on Doppler studies) or the intervention group (management based on angiogenic factors). In both groups, elective delivery was recommended at $\geq$37 weeks for FGR and at $\geq$40 weeks for SGA. The primary outcome was the occurrence of neonatal acidosis (umbilical artery base excess < -12mEq/L and pH < 7.15) or Caesarean for non-reassuring fetal status. Non-inferiority would be demonstrated if the lower limit of the 95% confidence interval of the difference between incidences of pregnancies without the primary outcome is less than -8.5%.

Results: 97.4% (528/542) of pregnancies in the control group and 97.1% (530/546) in the intervention group did not present the primary outcome (absolute difference, 0.30 [95%CI, -1.6 to 2.3%]), indicating non-inferiority. Additionally, compared with the control group, the rate of deliveries at < 39 weeks was reduced by 51% (RR 0.49, 95% CI: 0.43-0.57), the rate of composite adverse perinatal outcomes was reduced by 32% (RR 0.68, 95%CI: 0.47-0.98), the rate of neonates with birthweight < 2500g was reduced by 15% (RR 0.85, 95%CI: 0.73-0.98), and the rate of pre-eclampsia and related disorders was reduced by 52% (RR 0.48, 95%CI: 0.23-0.96).

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