after fibroids was provided only by sutures (control group, CG). In all patients’ ultrasound examination has been done 1, 3, 6 and 12 months after myomectomy to assess the healing of the myomectomy wound.

Results: In CG, in the ultrasound examination, an avascular hypoechoic area, less than 3 cm in diameter, was observed. In SG, 1 month after myomectomy an avascular hyperechogenic area (AHA) corresponding to the absorbent material was observed in the place of enucleation of the fibroid. Median (Me) AHA volume (calculated from 3 dimensions) 1 month after surgery was 30% of the volume of enucleated fibroids. Me AHA volume 3 and 6 months after myomectomy was respectively 12.5% and 3.7%. 12 months after surgery, in all patients, AHA was not observed (an ultrasound image similar to CG).

Conclusions: We conclude that uterus image after myomectomy of large fibroids with intraoperative application of absorptive materials with fibrinogen is similar to that after classic myomectomy, after 12 months of observation.

EP15.25
HDliveFlow silhouette mode for the diagnosis of uterine enhanced myometrial vascularity/arteriovenous malformations
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We present our initial experience of using the HDliveFlow silhouette mode to construct images of three cases of uterine enhanced myometrial vascularity/arteriovenous malformations (EMVs/AVMs). In the first case, the HDliveFlow silhouette mode clearly depicted a fused vascular tumour with irregular contour in the posterior myometrium. In the second case, a large hypervascular mass occupying the entire fundal lesion of the uterus was clearly identified using the HDliveFlow silhouette mode. Moreover, spatial relationships among the hypervascular mass, intruterine blood collection, and dilated, spiral-shaped right uterine artery enabled the clear localisation of the mass. In the third case, a large hypervascular mass occupying the right fundal lesion of the uterus was also recognised with the HDliveFlow silhouette mode.

The HDliveFlow silhouette mode provides a novel, unique sonographic image of uterine EMVs/AVMs, and might facilitate their diagnosis and localisation in the myometrium.

EP15.26
Intrauterine fluid instillation and transtubal flow: a randomised controlled in vitro trial comparing gel and water
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Objectives: Possible transtubal spillage of malignant cells is a major concern in fluid instillation sonography. This study aims to compare the transtubal flow of gel and saline and validate the clinical hypothesis that application of fluids with higher viscosity requires less fluid and causes less spillage.

Methods: Randomised controlled in vitro trial comparing gel and saline infusion on 20 tissue specimens after hysterectomy with bilateral salpingectomy. Instillations are performed with saline and gel dyed with a 1% ink solution. Qualitative assessment of tubal spill is investigated as primary outcome. Secondary outcomes are instillation-volume and -pressure, assessed by measuring endometrial cavity dilation at in vitro ultrasound examination and subjective numeric 10-point scoring of the instillation pressure by a dedicated examiner.

Results: Preliminary census consists of 14 fluid instillations in 7 out of 20 foreseen hysterectomy specimens. Tubal patency was observed in 5/14 procedures. Tubal spill was seen in 1/7 gel infusions and was bilateral. Of 7 instillations with saline, transtubal flow was seen on 4 occasions, of which 2/4 occurred bilaterally. Subjectively assessed instillation pressures were 9 arbitrary units for gel and 3 for saline. Unilateral tubal patency required a median instillation volume of 7.5cc of gel versus 5.5cc of saline. Bilateral patency mandated 7.5cc of gel and 5.0cc of saline.

Conclusions: Gel is associated with decreased tubal spillage and is therefore safer.

EP15.27
Is size of endometrial polyps associated with the risk of malignant or premalignant changes in postmenopausal polyps?
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Objectives: There is currently no consensus as to whether surgical resection should be undertaken for all postmenopausal polyps. Some studies report that polyps greater than 1cm in size are associated with increased risk of malignancy and therefore should be removed. The aim of our study was to prospectively assess if polyp mean diameter was associated with malignant or premalignant changes in postmenopausal women.

Methods: A single operator performed all transvaginal ultrasounds to identify polyps in postmenopausal women referred to our clinic between Oct 2015 and Dec 2016. Mean diameter of each polyp was calculated from measurements in three perpendicular planes. All women were offered a polypectomy. The polyps were divided into 2 categories, “malignant/premalignant” (including hyperplasia with atypia) or “benign”. A non-parametric test was used to compare the differences in the mean diameters of polyps in the two groups.

Results: 780 postmenopausal women were assessed, 152 polyps were diagnosed, 95 of which were surgically resected and thus included in the study. Mean age of women was 59 (IQR, 55 to 70), 64/95 (67%) women presented with postmenopausal bleeding, 15/95 (16%) unscheduled bleeding on HRT and 16/95 (17%) had no vaginal bleeding. Ten polyps (10.5%, (95% CI, 5.2 - 18.5)) were malignant/premalignant. The polyp mean diameter was significantly larger in malignant/premalignant polyps (16.2mm (IQR, 13.5 to 18.5)) compared to benign polyps (10.7mm (IQR, 7.9 to 14.9)) (P = 0.003). Using a mean diameter cut-off of greater than 1cm, the sensitivity and specificity of detecting malignancy/premalignancy was 90% and 47.2%, respectively; whereas, sensitivity and specificity using symptoms of vaginal bleeding alone was 90% and 43.7%, respectively.

Conclusions: There was an association between polyp size and the risk of malignancy/premalignancy. However, using polyp diameter greater than 1cm as a selection criteria for surgical resection did not improve the detection of malignancy/premalignancy compared to symptoms of vaginal bleeding alone.