

7.9 and 0.18, respectively in the TU; and 93.6%, 86.9%, 94.6%, 71.4%, 97.9%, 16.09 and 0.14, respectively in the PVF. Logistic regression analysis showed a significant association between DE in USL/TU/PVF and DE in the rectosigmoid (OR: 5.43,  $p < 0.001$ ).

**Conclusions:** TVS has a high accuracy, sensitivity, specificity, PPV, NPV, LR+ and LH- for the assessment of DE in the USLs, TU and PVF.

#### OP08.03

##### Intra- and interobserver variability of sonographic measurements of endometriotic nodules within the rectosigmoid colon

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**Objectives:** To assess the intra- and interoperator variability of sonographic measurements of endometriotic nodules within the rectosigmoid colon.

**Methods:** Five sonographers (three experienced and two inexperienced) reviewed 13 ultrasound images of endometriotic bowel nodules. The sonographers measured each nodule in three orthogonal planes using an offline DICOM viewer. The measurements were repeated at an interval of approximately one month. Interobserver and intraobserver agreement was calculated using an intraclass correlation coefficient (ICC). Bland-Altman plots were constructed to assess intraoperator limits of agreement, any variation related to size of the nodules and interoperator limits of agreement with the mean of experienced operator measurements plotted against inexperienced operator measurements.

**Results:** Interoperator agreement ranged from moderate to excellent (ICC = 0.7473 [CI 0.5353-0.9002] (length), 0.8125 [CI 0.6496-0.9674] (height) and 0.8170 [CI 0.6489- 0.9302] (width)). There was poor to excellent levels of agreement between experienced and inexperienced operators (ICC = 0.8975 [CI 0.5146- 0.9733] (length), 0.8903 [0.6138- 0.9674] (height) and 0.8506 [CI 0.3316- 0.9770] (width)). All experienced operators achieved good to excellent levels of intraoperator reproducibility (ICC => 0.7) in all planes however poor to excellent levels of agreement were achieved by the inexperienced operators. Inexperienced operators had a wider range of variation between the limits of agreement than experienced operators (14.2mm versus 9.1mm). The Bland-Altman plots revealed no significant association between size and levels of variation.

**Conclusions:** There were moderate to excellent levels of interoperator reliability, with better reproducibility seen amongst experienced operators than inexperienced operators. Intraoperator variability was greater amongst inexperienced sonographers than experienced operators with all experienced operators achieving good to excellent reproducibility.

#### OP08.04

##### Accuracy of the sonography for the diagnosis of endometriotic parametrial involvement: a systematic review and meta-analysis

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**Objectives:** The aim of this meta-analysis is to evaluate the diagnostic accuracy of transvaginal ultrasonography (TVS) to detect parametrial endometriosis, using laparoscopy as the reference standard.

**Methods:** A search for studies evaluating the TVS for assessing parametrial endometriosis compared to surgery from January 2000 to December 2020 was performed in PubMed/MEDLINE and Web of Science. The Quality Assessment of Diagnostic Accuracy Studies 2 evaluated the quality of the studies (QUADAS-2). All analyses were performed using MIDAS and METANDI commands.

**Results:** We identified 133 citations. Finally, four studies comprising 560 patients were included. Mean prevalence of parametrial endometriosis was 17%. Overall, the pooled estimated sensitivity, specificity, positive likelihood, and negative likelihood ratio of TVS for detecting parametrial endometriosis were 31% (95% confidence interval [CI] = 10% -64%), 98% (95% CI = 95%-99%), 18.5 (95% CI = 8.8-38.9), 0.70 (95% CI = 0.46-1.06), respectively. Diagnostic odds ratio (DOR) was 26 (95% CI = 10-68). Heterogeneity was high. The visualisation of a lesion suspected to be parametrial endometriosis increases significantly the pretest probability of parametrial endometriosis at laparoscopy.

**Conclusions:** The use of TVS for the detection of parametrial endometriosis have a high specificity but a low sensitivity.

*This study was partly supported by Fondazione di Sardegna grant F74119001010007.*

#### OP08.05

##### Evaluation of transvaginal ultrasound as a triage tool for planned multidisciplinary involvement in endometriosis surgery and level of hospital

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**Objectives:** To determine the effectiveness of advanced transvaginal ultrasound (TVS) to triage endometriosis surgeries to either a tertiary hospital with planned presence of multidisciplinary surgical teams (MDT) or a non-tertiary hospital.

**Methods:** A retrospective observational study was conducted in a single tertiary unit over 10 years (2011-2020) under one advanced endoscopic gynecological surgeon. Patients with rectal endometriosis (DE) or bowel tethering with either complete or partial obliterated pouch of douglas (POD) on TVS underwent a planned joint surgery with the same advanced gynecological endoscopic surgeon and colorectal surgeon. Patients that required bowel dissection, shaving, discectomy, or segmental resection were identified.

**Results:** After excluding The study identified 58 patients with rectal DE or tethering with an obliterated POD on TVS who underwent a planned joint surgery with the same advanced endoscopic gynecological surgeon and a colorectal surgeon in the tertiary unit. Patients who did not have rectal DE or tethering on TVS and had a positive sliding sign were assigned to be operated at a non-tertiary hospital. 50 out of 58 (86.21%) of the above patients required either rectal shaving, discectomy or segmental resection. A further 6 patients (10.34%) needed bowel dissection with bowel conservation, leading to a total of 56 out of 68 (96.55%) with bowel handling and input by the colorectal surgeon. Only 2 out of 58 (3.45%) did not need colorectal surgeon involvement.

**Conclusions:** TVS for endometriosis is a good triage tool for planning MDT involvement in endometriosis surgery and therefore determining the level of hospital to perform the operation. This will