

## **P352. Accuracy of three –dimensional- ultrasound and Magnetic resonance imaging in the diagnosis of mullerian duct-anomalies**

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Context Imaging is essential for diagnosis and management in patients with mullerian duct anomalies (MDA.) Hysterosalpingography (HSG) allows assessment of uterine cavity and fallopian tube patency but does not provide any information about the external uterine contour. ultrasonography is a noninvasive method however, restricted field, patient body habitus, and artifact from bowel gas may result in a request for further imaging with MRI, with the advent of three dimensional techniques, there is increased accuracy of sonographic diagnosis of MDAs.

Objective. to compare between three dimensional. Ultrasound and Magnetic resonance imaging in diagnosis of mullerian duct anomalies as regards the accuracy, sensitivity, and predictive values.

Patients and methods. study conducted upon 40 women suspected to have MDA by history of primary amenorrhea or recurrent early trimester abortions, or previous preterm birth moreover the patients underwent prior examination by HSG or two dimensional ultrasound and either of them suspect presence of MDAs. laparoscopy with or without hysteroscopy done for all cases to confirm the diagnosis.

Results. 25 women diagnosed with MDA using 3D ultrasound were confirmed by laparoscopy/hysteroscopy while 6 were diagnosed false as positive that shown to be negative by laparoscopy. compared to 29 of MRI diagnosis were correctly diagnosed. Only two cases were wrongly diagnosed as positive that did not confirmed by laparoscopy. the sensitivity was 83.5% versus 93.5% in 3D and MRI respectively. specificity was 40% versus 66.5%. 3D ultrasound was shown to have 80.6% positive predictive value and 44.4% negative predictive value compared to 90.6% and 75.5% for MRI group. the overall accuracy rate for 3D ultrasound is 72.5% while it was 87.5% for MRI.

Conclusion MRI has a higher accuracy rate in detecting MDA compared to three dimension ultrasound.

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