POSTER VIEWING
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P-749 Increased accuracy in infertility workup by the additional use of new modern diagnostic methods ("diagnostic TRIO"): results from a large retrospective analysis

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Study question: Is there any positive effect of adding new modalities to the traditional infertility work-up, like 3D sonography, office hysteroscopy and endometrial biopsy?

Summary answer: During infertility workup conventional diagnostic tests should be combined with new approaches (*3D-TVS*, *OHSC* and *endometrial biopsy) to achieve* more accurate and less invasive diagnostics.

What is known already: Female infertility can be explained by functional or organic abnormalities affecting the reproductive system. The most common organic causes include abnormalities within the uterine cavity (e.g. endometrial polyp, submucosal fibroid, intrauterine adhesion), morphological disorders (e.g. dysmorphic uterus, uterine septum) and abnormalities of the endometrium (e.g. chronic endometritis).

Study design, size, duration: In our retrospective study, we examined patients with primary and secondary infertility. All the patients were assessed by *3D-TVS* and *OHSC* to detect morphological and intrauterine disorders, and in special cases (repeated implantation failure – RIF), *endometrial biopsies* were carried out to detect endometrial disorders.

Participants/materials, setting, methods: Data of 606 patients examined between 2018 and 2022 were analyzed retrospectively.

Main results and the role of chance: In 606 cases 3D-TVS and OHSC were performed in patients (65.51 % primary, 34.49 % secondary infertility), who had unknown reason to infertility. By the combination of 3D-TVS and

OHSC we could verify uterine disorders in 39.93 % of cases. Together these two diagnostic methods found the probable infertility causing lesion almost 40 % of our patients. In the subgroup of 40 repeated implantation failure (RIF) patients, the "diagnostic TRIO" confirmed a disorder in 57.50 % of the cases.

Limitations, reasons for caution: Number of patients should be more to conclude more accurate data.

Wider implications of the findings: The proper condition of the uterine milieu, through correction of uterine cavity if necessary, endometrial receptivity are of paramount importance for the success of the treatment; as a result, intrauterine surgery as a new subspecialty has been developing.

Trial registration number: DE RKEB/IKEB: H.0250-2020