VP07.02

Ultrasonographic diagnosis of adenomyosis associated at Müllerian anomalies

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Objectives: Two main theories have been proposed to explain the origin of adenomyosis. The first theory postulated that adenomyosis results from invagination of the endometrial basalis into the myometrium as a repair mechanism after injury. Alternatively, it has been posited that during Mullerian duct development and fusion, some remnants of the embryonic tissue may be misplaced in the myometrium, subsequently giving rise in adult women to adenomyosis. The objective of our study is to evaluate the presence of adenomyosis in patients who had Müllerian anomalies (CUAs).

Methods: From 01/01/2018 to 31/12/2019 265 patients with CUAs were included. We evaluated the presence of adenomyosis in these patients. CUAs were classified according to the ESHRE-ESGE consensus of uterine anomalies. We recorded the presence of adenomyosis in each class of anomaly.

Results: Of 265 was 39 (14.71%) also presented adenomyosis. Relationship of adenomyosis and uterine anomaly and relative frequency (%) are shown in table 1. No findings of adenomyosis in the hypoplasia group (U5) were observed.

Conclusions: The most prevalent Müllerian anomaly associated with adenomyosis corresponds to U4 or hemi-uterus. We believe that in patients with Müllerian anomalies a thorough search for adenomyosis must be performed, especially in the cases of hemi-uterus.

VP07.03 Abstract withdrawn

VP07.04 Specifics of endometrial peristalsis in t-shaped uterine anomaly

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Objectives: There are controversial data on the effect of t-shaped uterine anomaly on reproductive function, pregnancy carrying, frequency of ectopic pregnancy, and ART outcomes. Mechanisms of decreased fertility in t-shaped uterine anomaly are still subject of investigation. It is known that one of the pathogenic factors of infertility is abnormal intrauterine sperm cell transport due to impaired endometrial peristalsis. The aim of study is to analyse characteristics of uterine motility in infertile women with t-shaped uterine cavity anomaly using ultrasound.

Methods: We examined 27 patients with t-shaped uterine cavity anomaly and 27 patients with normal uterine cavity shape who presented for primary infertility. All patients were 20-40 years of age (mean age 31.8 ± 4.8 years); infertility duration was 3-5 years. During their periovulatory period (menstrual cycle day 14-16) all patients underwent transvaginal ultrasound with registration of motor activity of subendometrial layers of myometrium in sagittal projection of whole uterus and with 5-minute fixed position with video recording of the entire scan. We recorded direction and number of peristaltic waves (cervicofundal or fundocervical), as well as presence of dysmotility.

Results: We found a statistically significant (p < 0.05) increase in peristaltic wave frequency in patients of study group (5-7/min) compared to control group (2-3/min). Dysmotility waves were recorded in only 5% of patients in control group and in 89% in study group, which was statistically significant.

Conclusions: The results suggest marked impairment of motor activity of subendometrial layers of myometrium in t-shaped uterine anomaly which may be a cause of subfertility in this patient category.

VP07.05

Relationship between serum progesterone levels and endometrial status on hCG injection's day in ART cycles

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Objectives: This study is conducted to investigate the relationship between serum progesterone levels and endometrial status on the day of HCG injection in women treated with assisted reproductive techniques (ART).

Methods: In 71 people who underwent IVF cycle on the day of HCG injection, blood samples were taken to measure the serum level of progesterone by ELISA kit and also the endometrial thickness of the patients was examined using transvaginal ultrasound. Based on the mean serum level of progesterone, patients were divided into two groups: progesterone ≤ 1 ng / ml and progesterone> 1 ng / ml. All demographic and clinical information and endometrial thickness were compared between the two groups. Finally, all data were analysed using SPSS software version 24.

Results: 71 women aged 25 to 44 years (35.05 ± 5.10) with a history of infertility and IVF were evaluated. The mean serum progesterone level and endometrial thickness on the day of HCG injection were 1.44 \pm 1.97 and 8.99 \pm 1.89, respectively. Also, the causes of infertility in patients were Unexplained (88.7%), Male & Female factors (9.9%), Male factors (1.4%), respectively. gravidity (p = 0.03) and history of abortion (p = 0.02) showed a significant difference (p < 0.05) between the comparison of the studied factors. In addition, the mean endometrial thickness in the Progesterone levels \leq 1 group (9.03 \pm 1.2) was higher than the Progesterone levels > 1 group (8.93 \pm 2.6). However, there was no statistically significant difference between endometrial thickness and progesterone levels on the day of HCG injection (PV> 0.05).

Conclusions: The results of this study showed that there is no significant relationship between serum progesterone levels on the day of HCG injection and endometrial thickness in women treated with IVF.

VP07.02: Table 1.

	U1	U2	U3	U4	U5	Total
No adenom	0	144 (86.27%)	26 (89.65%)	54 (81.81%)	2 (100%)	226 (85.28%)
Adenomyosis	1 (100%)	23 (13.77%)	3 (10.34%)	12 (18.18%)	0	39 (14.71%)
Total	1 (0.003%)	167 (63.01%)	29 (10.94%)	66 (24.90%)	2 (0.007%)	265