

fact, the present study revealed that may be there is a cause effect relationship between uterine anomaly and PCOS.

VP64.18

Evaluation of embryo gender sensitivity diagnosis and chromosome-Y using fetal DNA in culture medium

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Objectives: Perimplantation genetic diagnosis (PGD) has been used as an option for couples with the possibility of having a baby with a genetic disorder. The common method for performing this test involves isolating one cell from day 3 or a few cells from day 5 embryo and performing genetic studies on the cell extracted DNA. This performance method is invasive and can cause abortion after implantation in the uterus. Because of this, non-invasive methods for performing a PGD have been studied. Two non-invasive methods that are recently under investigation for performing a PGD include PGD using blastocyst fluid and PGD using embryo culture medium.

Methods: In this study, gender of 30 embryo on day 5, were determined using embryonic DNA extraction from the culture medium and PCR technique for evaluation of genes SRY and FMRP. Then their accuracy was assessed by means of ultrasound.

Results: The results of the PCR technique showed that 7 embryos were male, but ultrasound revealed that 13 were male.

Conclusions: The given results indicated that because of the low amount of DNA extracted from the culture medium, diagnosis of existence of the chromosome-Y by this method doesn't still have enough accuracy to diagnose the gender of the embryo.

VP64.19

The effect of gabapentin on intensity and duration of hot flashes in postmenopausal women: a randomised controlled trial

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Objectives: Menopause is the stage of time in which the menstruation stops following the loss of ovarian activity. The purpose of this study was to find out the effectiveness of gabapentin on hot flashes in postmenopausal women.

Methods: A randomised controlled trial from Feb 2010 to 2011 was conducted. 60 postmenopausal women who were referred to obstetrics and gynecology ward of two educational hospitals were recruited and divided into two groups (intervention and control). Intervention group received 300 mg gabapentin three times a day for three months, while control group received placebo. The intensity and duration of hot flashes in women scored and recorded using visual analog scale. Independent, paired t-test and chi-square test were used for analysing data.

Results: Intensity of hot flashes in the beginning of research in the intervention group was significantly different with the first, second and third follow-up visit ($p < 0.05$). Also at the end of intervention a significant difference between intervention and control groups were observed regarding the intensity, frequency and duration of hot flashes ($p < 0.05$ and $P = 0.01$ respectively).

Conclusions: According to the findings of this study; it appears that the use of gabapentin could decrease the intensity, duration and frequency of hot flashes in postmenopausal women. For postmenopausal women who hormone therapy is contraindicated, gabapentine could be an acceptable alternative.

VP64.20

Effect of hysteroscopy before intrauterine insemination on fertility in infertile couples

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Objectives: Uterine disorders affect the outcome of infertility treatment. Hysteroscopy is a useful procedure for diagnose and treatment of uterine disorders.

Methods: In this clinical trial, 110 infertile patients were candidate for intrauterine insemination (IUI). The patients were divided randomly in two equal groups ($n = 55$). In group one (control group), patients without hysteroscopy underwent ovulation induction by clomiphene citrate and hCG followed by intrauterine insemination. In group two (experimental group), patients were undergoing hysteroscopy before IUI on the day 21 of the cycle and due to abnormal findings, going under surgical treatment if they needed.

Results: In experimental group, hysteroscopy revealed pathology in the uterine cavity in 26 out of 55 cases. The overall rates of clinical pregnancy were higher in experimental group compared to the control group. Pregnancy rate in control group were 23.6% (11 out of 55 cases), in experimental group 22 out of 55 patients became pregnant equal to 40%.

Conclusions: The findings from this study showed that the use of hysteroscopy as a diagnostic or therapeutic procedure before IUI can increase the rate of pregnancy and finally decrease the failure rate of infertility treatment.

VP64.21

Endometrial thickness, ovarian dimensions and oocyte count in women following bariatric surgery and exercise: preliminary findings from the EMOVAR RCT

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Objectives: We evaluated endometrial thickness, ovarian volumes and oocyte count at baseline and at 16 weeks in a subsample of women with morbid obesity participating in a randomised controlled trial (RCT) aimed at assessing how exercise affects ovulation after bariatric surgery (BS).

Methods: A total of 12 childbearing aged women with a body mass index (BMI) $\geq 35 \text{ kg/m}^2$, who met the criteria for (and underwent) BS participated. Participants were randomly assigned to either exercise (i.e. 16 weeks of supervised strength and aerobic training 3 h/week) starting within approximately 10 days from BS, or usual care. Endometrial thickness, ovarian volume and oocyte count were assessed at baseline (i.e. before BS) and at week 16 through transvaginal ultrasound equipped with a 7MHz curved endovaginal transducer.

Results: Participants were 38.5 (interquartile range [IQR] 10.0) years and had a median BMI of 42.8 (IQR 3.9) kg/m^2 at baseline. So far, 4 women were assigned to the exercise group and 8 to the control group. There were no between-group differences in the change from baseline to week 16 (all outcomes $p > 0.05$). Considering the whole group ($n = 12$), endometrial thickness was 5.6 (IQR 5.9) mm at baseline and 4.1 (IQR 2.8) mm at week 16 ($p = 0.04$). The volume

of the right ovary was 31.9 (IQR 12.4) mm³ at baseline and 38.5 (IQR 10.2) mm³ at week 16 ($p=0.065$). The volume of the left ovary was 27.9 (IQR 26.8) mm³ at baseline and 31.6 (IQR 8.2) mm³ at week 16 ($p=0.01$). The total oocyte count of the right and left ovaries was 7.0 (IQR 4.5) at baseline and 7.0 (IQR 7.75) at week 16 ($p=0.51$).

Conclusions: This preliminary report suggests that a four-month exercise intervention initiated early after BS does not modify endometrial thickness, ovarian volumes or oocyte count further than BS alone. Bariatric surgery seems to increase ovarian volume and could induce an early decrease in endometrial thickness. Further research will determine how BS with and without exercise affects ovulation.

VP64.22

Progesterone-induced endometrial compaction in oocyte donation cycles after artificial endometrial preparation has an ameliorated outcome at blastocyst level but not in early cleavage stages

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Objectives: Endometrial compaction is the decrease of the endometrial thickness due to the effect of progesterone. It is evaluated by a vaginal ultrasound on the day of progesterone start and on the day of embryo transfer. A recent study by Haas et al. showed an improvement of pregnancy rate after a blastocyst transfer if compaction was at least 5%. This simple and cheap measurement is competing with more sophisticated test such as biopsy of the endometrium to find the window of implantation. We decided to evaluate the impact of compaction after 2; 3; and 5 days of progesterone start in an artificial donor egg cycle on the pregnancy rate.

Methods: 259 embryo transfers have been done in fresh or frozen cycles. Women were prepared with estrogen 6 to 12mg of valerate estradiol until the endometrium is at least 7mm then progesterone was introduced on the day of oocyte retrieval. Three routes of administration were used: vaginal, intramuscular and subcutaneous. Embryo transfer was performed on day 2 or 3 or at the blastocyst stage on day 5. The endometrial measurements were done by an endovaginal ultrasound on the day of egg collection then on the day of embryo transfer. Compaction is considered positive when there is a thickness decrease of more than 5% and no compaction when there is a decrease of less than 5% or increase in thickness.

Results: 55 cases blastocyst transfer pregnancy

Compaction 53% (15/28)

No compaction 25% (7/27)

P value $p < 0.05$

204 day 2 or 3 embryo transfer pregnancy

Compaction 38% (40/105)

No compaction 40% (40/99)

P value NS

Conclusions: Our preliminary results show an improvement in pregnancy rates when compaction is present on day 5 and our results are comparable to previous publication. In early transfer the compaction has no added benefits on pregnancy rate.

VP64.23

A pictorial essay of clinical applications of three-dimensional ultrasound in reproductive medicine

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Three-dimensional (3D) ultrasonography has been described as the new stethoscope to be used as a diagnostic tool that is necessary and central to a good physical examination performed by a medical practitioner. However, its clinical acceptance for diagnostic applications in routine gynecological practice remains poor despite the recognised advantages. This has prompted several efforts to promote as well as improve its wide acceptance in the clinical setting. Although part of this effort has included the development of a uniform system for the display of 3D images internationally, an atlas of what represents standard anatomic patterns or pathologic patterns as displayed with 3D ultrasound remains sparse. It has been argued that an experienced examiner can make correct and specific diagnosis based on the concept of pattern recognition of 2D greyscale ultrasound images. We believe that this should hold true for 3D ultrasonography. Therefore, as part of efforts towards actualising the general acceptance of 3D ultrasound as a component of the imaging armamentarium in gynecology, we present herewith an atlas of 3D ultrasound images obtained using a Voluson P8 (General Electric, USA) and a review of the literature to determine their usefulness as a diagnostic technique for common uterine pathologies encountered in the gynecology clinic. The atlas will be helpful in providing support for imagers to overcome diagnostic doubts and enable early arrival at accurate diagnosis.

Supporting information can be found in the online version of this abstract

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Giant uterine myoma and pregnancy: percutaneous drainage as an alternative to myomectomy

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A 39-year-old primigrade with a previous diagnosis of a 10cm subserous myoma was under gestation follow-up in our unit. During the first months of gestation, the patient presented a cystic degeneration of the myoma that required analgesia with opioids. At week 14+5 a large subserous myoma of 20 x 10 x 15cm showing signs of necrosis and heterogeneous content with cystic predominance was observed. The fibroid grew progressively up. At 18 weeks, MRI was performed: the myoma measured 26 x 16 x 10cm showing a predominance of liquid content and a pedicle of 4.6cm. Due to important maternal discomfort, ultrasound-guided aspiration was performed with a 13G trocar, obtaining 2,800cc of serohematic material. The patient remained asymptomatic after drainage. A progressive growth of the myoma and reappearance of symptoms was observed. At week 26+4, a 10F intramniomatous drainage catheter was placed percutaneously and 1,400 cc of serohematic fluid was drained. After 5 days the catheter was removed due to significant discomfort of the patient. Currently, the patient is asymptomatic at week 36 of gestation, the fibroid measure 20 x 11 x 11cm and fetal growth is adequate.