studies from Valencian Infertility Institute motivated us to use cabergoline in prevention of developing of severe OHSS.

**Materials and Methods:** Starting from November 2006 cabergoline has been used in the treatment of 17 women identified as high-risk patients for developing severe OHSS. All patients received cabergoline starting from hCG administration, except for one patient to whom cabergoline was given on the 3rd day after hCG administration. The dose of cabergoline was 0.5 mg per day and duration of treatment was 8 days. All patients have been carefully monitored every day of hospitalization.

**Results:** During medication with cabergoline all of patients were in very good clinical condition, with symptoms and clinical, ultrasound and biochemical signs of OHSS in regression. All of patients had the successful embryo transfer and consecutive clinical pregnancies were detected in 8 patients.

**Conclusions:** Our first clinical experiences in using cabergoline to treat patients under the risk of severe OHSS show that cabergoline improves clinical conditions of these patients without influencing the success of embryo transfer.

**P789**

The protocols of stimulation in the programme of IVF/ICSI/ET in patients with PCOS

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**Aim of investigation:** To analyze the effect of long and short protocol of stimulation on the outcome of IVF and ICSI procedure in the patients with PCOS.

**Material and Methods:** Clinical investigation was performed as a prospective study at The Frauenklinik der Justus-Liebig-Universität in Giesen (Germany). The study comprised 103 (122 cycles) patients with PCOS included in the programme of in vitro fertilization (IVF and ICSI).

**Results of investigation:** Following the aspiration, the mean number of obtained follicles in the group of patients with a long stimulation protocol (X = 9.3) was significantly higher (p < 0.05) than in the group with a short stimulation protocol (X = 6.8). The number of biochemical, clinical and realized pregnancies in relation to the total number of cycles in both investigated groups was not statistically significant. The incidence of abortions in the patients with a long protocol N = 3 (5%), did not significantly differ from the patients with a short protocol N = 3 (11%).

**Conclusions:** The administration of a long stimulation protocol in the patients with PCOS included in the programme of IVF And ICSI/ET, showed a tendency of better success in realization of conception and decrease of the abortion rate relative to the short protocol. The short protocol of stimulation was useful in the PCOS patients with weaker response to the stimulation in previous cycles.

**P790**

Correlation between infertility and rapid sperm head decondensation after lysis challenge

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**Introduction:** Apoptotic human sperm cells are not distinguishable from healthy sperm by conventional microscopy leading to incorrect diagnoses. Dying sperm exhibit subtle disrupted membranes with phosphotidylserine translocating from the inner to outer membranes. Assessment of rapid head decondensation after lysis reagents would help identify males with predominance of apoptotic sperm. The hypothesis was that rapid sperm head decondensation was associated with infertility. The objective was to analyze the different levels of sperm head decondensation after lysis reagent exposure.

**Materials and Methods:** Frozen-thawed sperm from fertile (n = 5, gravida > 0, female age < 35 yrs, sperm count > 20 mill/mL) and infertile (n = 5) cases were centrifuged-washed and 0.1 mL aliquots added with 0.1 mL (mercaptopethanol-based) lysis reagent. After 5 mins (21°C), the sperm were categorized by phase contrast microscopy into: (A) complete decondensation (B) balloon-shaped (C) dumbbell (D) granular or (E) compacted shapes. The data were analyzed by Student t-test statistics.

**Results:** The infertile group had more (P < 0.05) type A completely decondensed heads (67.8 ± 19.5 % versus 25.0 ± 15.5 % fertile; mean ± SEM). Furthermore, there was less granular heads in the infertile group (4.8 ± 2.5 % versus 24.8 ± 10.0 %). There were no differences in the remaining categories (B, C, E) of decondensation.

**Conclusions:** The results suggested that sperm from the infertile group had weak membranes that rapidly dissolved to decondense sperm DNA content. Fertile sperm heads showed more granularity suggesting the presence of non-condensed nucleosomes. Interestingly, fertile sperm exhibited higher percentages of compacted heads when challenged by lysis reagents but significance was not reached. Clinical significance in this study included demonstrating a link between rapid sperm decondensation and infertility. Upcoming research will involve testing other lysis reagents in support of the development of a rapid and reliable male fertility test.
normalization effect of ozone therapy for that matter on the levels of endogenous intoxication and the state of LP.

**P792**

**Correlation of fatty acid composition with motility in fresh and capacitated human spermatozoa**

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**Introduction:** The lipid composition of spermatozoa plays an important role for the viability, maturity and functions of those cells. Has been suggested that the proportion of unsaturated fatty acids (UFA) may have an influence over the membrane fluidity and flexibility.

The aim of the study was to evaluate the relationship between motility and fatty acid composition of human spermatozoa before and after in vitro capacitation.

**Materials and Methods:** The population under study consisted of 50 consecutive males from infertile couples subjected to IVF/ICSI program in our Human Reproduction Unit from Cruces Hospital (Vizcaya, Spain), between June and September 2007. Patients were divided in two groups according to their sperm motility: group I (n = 25) corresponded to ≥40% of progressively motile sperm and group II (n = 25) <40%. All semen samples were collected by masturbation following 3 days of abstinence and analyzed according to WHO criteria. Capacitation was performed by swim up method. Total sperm lipids were subjected to acid-catalysed transesterification and fatty acid methyl esters analyzed by capillary gas-liquid chromatography. Results were expressed as nmole percentages of total fatty acids.

**Results:** In fresh samples, spermatozoa from group II patients showed significantly higher levels of total saturated fatty acids (SFA), and lower contribution of total monounsaturated fatty acids (MUFA) than sperm from group I. Total polyunsaturated fatty acids (PUFA) content was similar in both groups. However, in capacitated samples, the levels of docosapentaenoic n-3 acid, docosahexaenoic acid (DHA), PUFA n-3 and the double bond index (DBI) were significantly lower in group II compared with group I. Furthermore, the ratio of n-6 to n-3 fatty acids was increased in group II.

In correlation analysis, there were significant positive correlations between sperm with progressive and linear motility (a %) with increased PUFA content preservation, increased flexibility.

**Conclusion:** Correlation of fatty acid composition with motility in fresh and capacitated human spermatozoa before and after in vitro capacitation.

**P793**

**Evaluation of role of sildenafil in improving IUI success rates**

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**Objectives:** To evaluate the role of sildenafil in improving IUI success rates.

**Material and Methods:** A randomised control trial was conducted in Deptt of Obs & Gyn, CSM Medical University (former KGMC), Lucknow, India. 50 infertile couples failing to conceive after 2 cycles of intrauterine insemination were registered after taking consent. They were randomised to receive either 25 mg vaginal suppositories of sildenafil four times a day, or no treatment, from day 5 of cycle for 10 days. They were subjected to 2 cycle of IUI (ovulation induction in all cases with clomiphene citrate from Day 2 to day 6) and uterine artery doppler parameters & endometrial thickness on day of HCG trigger, and conception rates in the two groups were compared.

**Results:** There was a statistically significant decrease in uterine artery pulsatility index (p<0.001) and increase in endometrial thickness (p<0.001) in cases as compared to controls conception rates were 20% in cases & 0% in controls (p=0.018).

**Conclusion:** Sildenafil being a vasodilator, increases uterine blood flow, decreases pulsatility index of uterine artery and increases endometrial thickness which in turn enhances the endometrial receptivity giving a better success in IUI cycles.

**P795**

**Evaluation of endometrial receptivity by sonographic markers and hormonal profile in patients of unexplained infertility**

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**Objective:** Unexplained infertility is failure of conception without any demonstrable cause. Its incidence ranges from 10% to 30% depending upon the diagnostic criteria employed. Unexplained infertility may be due to subtle abnormalities at cellular/molecular levels in the endometrium affecting endometrial receptivity which is the window of time when the uterine environment is most conducive to embryonic implantation. Its assessment is crucial to the optimum management of these patients.

Endometrial receptivity can be assessed by various biochemical markers, sonographic markers and hormonal profile. The objective of the present study was to evaluate endometrial receptivity in women of unexplained infertility with sonographic markers and Doppler blood flow status of the endometrium and the hormonal profile.

**Materials and Methods:** This was a prospective study conducted in the Department of Obstetrics and Gynaecology, Lady Hardinge Medical College & Smt. Sucheta Kriplani Hospital, New Delhi from October 2006 to March 2008. 250 patients of infertility of at least one year duration were screened by detailed history, examination and relevant investigations of both the male and female partners to determine the cause of infertility. A total of 46 patients of unexplained infertility were enrolled in the study and