

## P-12

## Naloxone in favour of fertility

Lakzaei F<sup>1</sup>, Karami M<sup>1</sup>, Jalali Nadoushan MR<sup>2</sup>, Hassani F<sup>1</sup>.

1. Department of Biology, Faculty of Basic Sciences, Shahed University, Tehran, Iran.

2. Department of Pathology, School of Medicine, Shahed University, Tehran, Iran.

Email: lakzaei.fateme@yahoo.com

**Introduction:** Different studies report occurrence of polycystic ovarian syndrome (PCOS) in a high percentage of infertility in women during reproductive age. This study discussed the naloxone interference with the PCOS in rats.

**Materials and Methods:** 58 Female Wistar rats (weighing 200-250 g) kept at animal lab at Shahed University as virgin diestrous under standard conditions. To induce the PCOS they were intra-peritoneally (i.p.) injected L-arginine (50 mg/kg) through a period lasting nine days/ once a day. For drug intervention naloxone (0.4 mg/kg) was 30 min pre-injected (i.p.) during the experimental phase (9 days /once a day). A group received single naloxone (0.4 mg/kg, i.p.) during the experiments to provide comparison. The control group solely received saline (1 ml/kg, i.p.) throughout the treatment period. After the completion of the injections the rats were coupled with the intact males. The females were garaded 0 of gestation by observation of vaginal plaques. They were surgically examined in days 19-20 of gestation to provide the necessary data.

**Results:** The number of fetuses was significantly changed in L-arginine treated group. They valued low in breeding capacity. This value, however, was adjusted by prior injection of naloxone. Moreover, the single naloxone group showed no significant change in the value compared with the control.

**Conclusion:** This research likely represents the case of infertility in the animal PCOS model. The study furthermore proposes the fertility effect of naloxone on the syndrome.

**Key words:** Fertility, Polycystic Ovarian Syndrome, L-arginine, Naloxone, Fetus.

## P-13

## Effects of letrozole versus clomiphene citrate in combination with recombinant follicle-stimulating-hormone on intrauterine insemination outcome

Alborzi S, Dadras N, Zarei A, Samsami A.

Department of Obstetrics and Gynecology, Ghadir Hospital, Shiraz University of Medical Sciences, Shiraz, Iran.

Email: Dadras.nasrin@gmail.com

**Introduction:** To compare the effects of letrozole and clomiphene citrate (CC) in combination with recombinant follicle-stimulating hormone (rFSH) for controlled ovarian hyperstimulation before intrauterine insemination (IUI) in infertile women.

**Materials and Methods:** This randomized controlled study was conducted in Shiraz IVF center from October 2009 to October 2011 on 144 women with unexplained infertility, mild male factor, PCOS and mild endometriosis randomly divided to two groups, receive 5 mg/day letrozole at days 5-9 menstrual cycle before IUI (n=72, IUI cycle=119) or 100mg daily CC in the same period (n=72, IUI cycle=107). All patients received 150 IU rFSH from day 8 until day of HCG administration. 10000 IU of HCG was injected when there were one or two mature follicles with diameter of more than 18 mm.

**Results:** The pregnancy rate per patient was (11.1%), (19.4%) in letrozole and CC groups respectively (p=0.123). The abortion rate was significantly lower in letrozole group (0.8% vs. 6.5%; p=0.031). The ongoing pregnancy rate found to be comparable between two study groups (9.7% vs. 9.7%; p=0.996). The number of administered rFSH was significantly higher in letrozole group compared to CC groups (8.9±1.9 vs. 8.2±2.2; p=0.018). Number of mature follicles (p=0.239) and endometrial thickness (p=0.270) was comparable between groups.

**Conclusion:** Administration of letrozole for ovulation induction prior to IUI cycles is not associated with increased pregnancy rate per patient and cycle, mature follicles and endometrial thickness compared to CC. However letrozole administration was associated with increased rFSH required dosage and decreased abortion rate following IUI cycles.

**Key words:** Letrozole, Clomiphene citrate (CC), Recombinant follicle stimulating hormone (rFSH), Intrauterine Insemination (IUI), Pregnancy rate.

## P-14

## Effects of localized endometrial injury on intrauterine insemination outcome

Zarei A<sup>1</sup>, Parsanezhad ME<sup>1</sup>, Alborzi S<sup>1</sup>, Dadras N<sup>2</sup>, Samsami A<sup>1</sup>, Zolghadri J<sup>1</sup>.

1. Department of Obstetrics and Gynecology, Shiraz University of Medical Sciences, Shiraz, Iran.

2. Ghadir Hospital, Shiraz University of Medical Sciences, Shiraz, Iran.

Email: Dadras.nasrin@gmail.com

**Introduction:** This study aimed to investigate the effect of local endometrial injury on outcome of intrauterine insemination (IUI) cycles.

**Materials and Methods:** This prospective, randomized, controlled study was conducted in University and private infertility clinics of Shiraz from January 2011 to May 2012. 144 women with unexplained infertility, mild male factor and mild endometriosis randomly divided into two study groups. Patients were randomly assigned to undergo endometrial biopsy between days 6-8 of previous menstrual cycle before IUI (n=72, IUI cycles=126) or nothing (n=72, IUI cycles=105). Pregnancy rate as main Outcome Measures was investigated.