

I S-103 Effects of Naloxone on the Gonadotropin Level and the Number of Fos Positive GnRH Neurons in Immature and mature Female Rats

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[Objective] To examine the mechanism of endogenous opioid in the regulation of gonadotropin secretion during the postnatal development, developmental changes of the naloxone (NAL) effects on the serum gonadotropin level and the number of Fos positive GnRH neurons were investigated in immature and mature female rats. **[Methods]** Blood samples were obtained from immature rats at the different postnatal ages (3, 5, 10, 16, 20, 25 and 30 days old) and mature rats (9 weeks old) at the all 4 stages of estrous cycle 30 min after the injection of NAL. For double immunocytochemistry for Fos protein and GnRH, immature (d16 and d30) and mature rats were perfused with a 4% paraformaldehyde-PB 90 min after the injection of NAL (2.5mg/kg). **[Results]** NAL significantly increased the serum LH levels at the ages of d5, d16, d20, d25 and d30 in immature rats. In mature rats, NAL increased the serum LH at the stages of estrus, diestrus 1 and diestrus 2. The FSH levels were significantly increased at the ages of d5, d16 and d20 in immature rats. In mature rats, NAL increased serum FSH only at the stage of diestrus 1, but no significant effect was observed in other stages of estrus cycle. The effect of NAL on serum gonadotropin level was especially strong at the age of d16, but some response was also observed at elder ages of rats. Nevertheless, Fos-positive GnRH neurons were rarely observed in d16 groups after the injection of NAL, but some Fos positive GnRH neurons were consistently observed in d30 and the mature group. **[Conclusion]** These results suggest that the mechanism of opioidergic inhibitory regulation for the gonadotropin secretion in immature female rats seems to be different from that in mature female rats.

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CLINICAL EXPERIENCE OF CU-T380A IUCD INSERTED WITHIN 12 HOURS AFTER ABORTION.

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To assess the clinical performance of Cu T 380A IUD inserted within 12 hours after evacuation of the uterus in cases of first trimester spontaneous abortion. Three hundred women who consented to use an IUD after abortion and have no contraindication for IUD application had the Cu-T 380A IUCD inserted before they were discharged from the hospital (maximum 12 hours following evacuation of the uterus). All women were asked to come for follow-up visits every 3 months for the 1st year after the IUD insertion. Thirty nine women did not attend for follow-up and were excluded from the study. No cases of uterine perforation or acute pelvic infection were reported during the IUD application. After one year of use there were one case of pregnancy and 5 cases of expulsion. Bleeding and pain were reported by 46 women but they were severe enough to necessitate removal of the device in only 14 cases. Twelve women opted to remove the IUD because of the desire for another pregnancy. The continuation rate after one year of application was 87.7%. IUD insertion in the immediate post-abortion period is as safe and effective as the interval IUD application. This contraceptive option should be available in all health care sites that offer the abortion services.