

THE EFFECTS OF PRENATAL MORPHINE EXPOSURE ON PAIN RESPONSE

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Background: Drug abuse during pregnancy is a growing problem in all developed countries of the world. Maternal drug abuse affects the developing system and its long-term effects can persist till adulthood so it can decrease the rate of their maturation. Since endogenous opioid induced analgesia, and morphine can interact with it, Thus the present study was designed to determine whether the exposure to the morphine during gestation permanently alter pain response.

Objective: To determine the effects of prenatal morphine exposure on pain response.

Materials and methods: 12 Pregnant rats were divided to morphine and control groups. Morphine was administered (S.C) to female rats twice a day (08h and 20h) on gestational days 11-18, (5 mg/kg morphine for 3 days and 10mg/kg for 5 days). Analgesic response of pups (P90, n=6) were tested by formaline test .

Finding: The results of our experiment demonstrated that prenatal morphine exposure rats exhibited significantly lower pain thresholds.

Conclusion: Prenatal morphine exposure impair pain sensitivity.