

Study of comparative anatomy of uterus of surri mouse addicted to morphine with uterus of healthy mouse during life period

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Introduction:

Morphine addiction is often associated with menstrual irregularity (Gaulden, 1964; Stoffer, 1968). Morphine depresses basal LH release and blocks proestrus and sex steroid induce LH surges (Ieiri, Kalra). A number of studies have shown that administrator of drugs of abuse during the critical period of brain sexual differentiation results in abnormal post pubertal reproductive performance in humans and animals(Crowell, R.)

Materials & Methods :

A Total number of 72 female surri mice from age of 3 weeks were selected and 60 mice of them after being marked and determining the weight , were divided in two experimental group: and 12 of the divided in two groups of control (water) and Sham(water + sugar). Each experimental groups , were taken morphine orally at concentration of 0.1 and 0.01 mg/ml in drinking water for 9 weeks.

Results and discussion :

Between two experimental groups , taken morphine there was no significant difference from view of point on length and width of uterus. But between the experimental groups with 0.1 and 0.01 mg/ml of water with the Sham groups and control there was significant difference ($P < 0.01$) and the appearance of uterus was pale and filiform(fig.1). Weight , Changes in the control and sham groups was not significant while between control and sham with experimental group there was significant difference($P < 0.01$)(table 1).



Figure 1: Uterus ;Experimental group (insert.a) and control group (insert b) , Age = 12 weeks , (x10)

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Table 1: statistics of weight , Lenth & width of uterine horn of surri mice based on treatment and control groups

Statistics Groups type	Length of Uterine horn (mm)	width of Uterine horn (mm)	Weight of mouse body
	Mean± SE Sample size		
3-12 weeks 0.01 mg/ml Morphine	1.31± 0.06 21	1.06 ± 0.08 21	23.95 ± 0.76 21
3-12 weeks 0.1 mg/ml Morphine	1.33 ± 0.03 29	0.87 ± 0.06 29	25.48 ± 0.56 29
3-12 weeks Water & Sugar	1.33 ± 0.03 6	1.83 ± 0.06 6	32.83 ± 0.60 6
3-12 weeks Water	1.62 ± 0.05 6	1.68 ± 0.05 6	30.83 ± 0.79 6