

The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:2, No:1 (1), 2017

Web: http://www.turjoem.com

ISSN : 2149-4711

P96. OXYTOCIN REPLACEMENT OR THE EFFECTS OF ENRICHED ENVIRONMENT ON MOTHERHOOD ATTITUDES

Ummu Ebiha CELIK, Gulsah APAYDIN, Huseyin AYHAN, Esra CALIK VAR, Mesut AKYOL, Ziya Cibali ACIKGOZ, Ahmet CARHAN

Yildirim Beyazit University, Medical Faculty, 4th year student, Ankara Biltek College, Ankara Yildirim Beyazit University, Faculty of Health Science, Social Services, Ankara Yildirim Beyazit University, Medical Faculty, Biostatistics Dept., Ankara Yildirim Beyazit University, Medical Faculty, Microbiology Dept., Ankara Yildirim Beyazit University, Medical Faculty, Medical Biology Dept., Ankara

Oxytocin is a hormone in the form of a protein which consists of nine amino acids that has different effects on

living creature. In this study, we will investigate the effects of oxytocin on motherhood attitudes.

In the studies with rats, the baby rats have been taken away from the insensible mother rats who do not show licking or grooming, have been given to concerned mother rats. Those rats which carry insensible mother genes turned into concerned mothers.

Therefore, two-staged study has been designed. At the first stage, the aim is to create insensible mother rats. To create insensible mothers, stress factor has been used such as dark environment and leaving them without mother

The second stage will be performed with the baby rats of insensible mother rats. Herein, the aim is to turn baby rats into concerned ones. To make this, 3 methods are going to be used; 1) giving them to sensible mothers, 2) oxytocin replacement, 3) taking them into an enriched cage with food and fun. Five groups will be created for insensible baby rats.

1st group: they will be taken from insensible mothers and given to concerned mothers

2nd group: they will be taken right after borning from an insensible mother and theoxytocin replacement will be carried out daily for three weeks till puberty

3rd group: they will be taken right after borning from an insensible mother, and when they reach puberty (average 22nd day), the oxytocin replacement will be carried out for 3 weeks daily

4th group: they will be taken right after borning from an insensible mother, they will stay in an enriched cage for 3 weeks till puberty.

5th group: they will be taken right after borning from an insensible mother, and when they reach puberty (average 22nd day), they will stay in an enriched cage for 3 weeks.

The experimental results will be compared with three methods.

1st method: the evaluation of oxytocin level in the blood

2nd method: the evaluation of brain functions with PET

3rd method: the observation of communication between five group of rats and their siblings.

In conclusion, we aim to show that the methodological differences in experimental design at different time point of lifewill possibly lead to the evaluation differences. One of the experimental set up will help us better understanding the oxytocin replacement or the effects of enriched environment on motherhood attitudes.

* apaydngulsah@gmail.com