Oxytocin Level among Heroin Users and Its Correlation with Personality Traits and Perceived Childhood Neglect

submitted in partial fulfillment of the requirement of Master degree in Neouro-Psychiatry

By

AMANY MOSTAFA MOHAMED

M.B.B.CH

Supervised By

PROF. HANI HAMED DESSOKI

Professor of Psychiatry

Acting Dean of Faculty of Nursery

Supervisor of Psychiatry Department Fayoum University

Faculty of Medicine –BeniSueif University

ASSIST.PROF. MOHAMED RAMADAN SOLTAN

Assist.Professor of Psychiatry

Faculty of Medicine – Fayoum University

PROF.HWAYDA AHMED ABDELRASSOL

Professor of Clinical Pathology

Faculty of Medicine – Fayoum University

Department of Psychiatry

Fayoum University

2022

Oxytocin Level among Heroin Users and Its Correlation with Personality Traits and Perceived Childhood Neglect

submitted in partial fulfillment of the requirement of Master degree in Neuro-Psychiatry

By

Amany Mostafa Mohamed

M.B.B.CH

Department of Psychiatry

Fayoum University

2022

ABSTRACT

Background: Personality traits and perceived childhood maltreatment are of the predictors and indications of development of substance use disorder. Many studies have discussed oxytocin effect on personality traits and relation with childhood trauma and how both affect the addictive process.

Objectives: Evaluation of the possible difference in oxytocin basal level between heroin users and healthy controls and the potential association of it with the basic dimensions of personality traits and perceived childhood adverse experiences in heroin users.

Methods: A sample of 40 heroin dependent patients, and 40 healthy control matched in age, sex were assessed and compared as regarding serum oxytocin level by ELISA, personality traits assessed using Temperament and character inventory- revised (TCI- R) scale, and childhood adverse events assessed using childhood trauma questionnaire and severity of addiction was assessed using Addiction Severity Index scale(ASI) for the heroin users only.

Results: There was a statistically significant difference between the patient's group and the control group as regarding the serum oxytocin level: the control group had a higher level (139.9 pg/ml) and lower mean of oxytocin level among cases (68.6pg/ml) with p-value <0.001. There was a statistically significant negative correlation with p-value <0.05 between oxytocin level and each Novelty seeking, and Harm avoidance, in addition to a positive correlation between oxytocin level and each of reward dependence, self-directedness, and cooperativeness items of (TCR-R), among cases. Conclusion: the interaction between serum oxytocin level, personality traits, childhood trauma should be considered when dealing with heroin dependent patients as they are affected and affected by heroin dependence.

Key words: Oxytocin, Personality traits, Childhood Trauma and Heroin Addiction.