INFLUENCE OF DIFFERENT PERIODS OF STRESS ON BEHAVIORAL PARAMETERS AND DEPENDENCE OF MORPHINE IN FEMALE RATS

Vey, L.T.; Rosa, H.Z.; Metz V.G.; Barcelos, R.C.S.; Segat, H.J.; Dias, V.T.; Burger, M.E.

1Programa de Pós Graduação em Ciências Biológicas: Bioquímica Toxicológica, UFSM-RS, Brasil
2Departamento de Fisiologia e Farmacologia, UFSM-RS, Brasil
3Programa de Pós Graduação em Farmacologia, UFSM-RS, Brasil

Introduction and objectives
Drug addiction has a considerable impact on society, resulting in one of the biggest health problems reaching different ethnic groups and social classes in worldwide. In humans, early stress in the form of childhood abuse and neglect has been associated with increases in stress-reactivity and vulnerability to several psychiatric disorders and substance abuse later in adult life. Developmental studies in animals have confirmed clinical evidence that both prenatal and early postnatal perturbations can have a long-lasting impact on (hipotálamo-pituitária adrenal)- HPA axis function. In this study, we evaluated the influence of stress in different periods of development (fetal and neonatal) and their preference for morphine in adulthood.

Material and methods
Four dams pregnant were exposed to unpredictable stress protocol, which was held for two weeks. In PND 1, Litters were subdivided into more two groups: unhandled (UH) and postnatal stress (Post-NS) (n = 16). On PND 9, four animals of each experimental group of pre-and post-NS were euthanized for corticosterone analysis in. The body weight of the offspring was recorded on PND1 and PND-9. On PND 40, the animals were subjected to behavioral by conditioned morphine-place preference protocol.

Results and conclusion

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Key Words: Stress, Corticosterone and Addiction.