

Natureza do trabalho: Resumo

TÍTULO

STANDARDIZATION OF ELEVATED PLUS-MAZE AND OPEN-FIELD TESTS IN THE FEDERAL UNIVERSITY OF GRANDE DOURADOS.

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RESUMO

Introduction: Anxiety has been conceptualized as a response to the adaptive process to a variety of conditions imposed by the environment in which we live. Therefore, we can consider the anxiety as a previous behavior to actions to come, and from the moment that this situation starts to be routine, biological changes can lead to a variety of cases of anxiety, settling thus a pathology. Animal models have been vital to recent advances in experimental neuroscience, including the modeling of common human brain disorders such as anxiety. Thus, many animal models of anxiety were proposed in order to understand neural mechanisms of anxiety and consequently to select novel pharmacological targets and tools to be used in rational drug design. Many experimental models have been standardized and agreed to evaluate the anxiolytic activity of compounds. Among them the open field arena and the plus-maze are the most used. **Material and Methods:** Male Swiss mice (n=6) were orally treated with saline 60 min before behavioural testing; elevated plus-maze first and after open-field tests. The animals were observed for 5 minutes in each test. **Results:** The Elevated plus-maze test was observed under entry numbers and time spent on open arm, about 10%, compared to the closed arm 40% and there was no change motor. In open-field tests, the animals had a mean of transportation in 92 spaces defined within the open-field, with an average of 1 per animal freeze and 1 cleaning averaging 10 seconds. **Discussion and Conclusion:** The results obtained in this study are in agreement with the literature, which shows that animals belonging to the control group have from 10 to 30% retention in the open arm. In addition, the open-field test the number of freezing and cleaning should be low, since this is high in anxious animals. Thus, we conclude that for elevated plus-maze test and open-field test performed in the laboratory of the faculty of health sciences at the Federal University of Grande Dourados (UFGD), have standardization for the control group for both anxiety tests and for other related purposes.

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