

Establishment of an assessment method by oral administration and proposal of a new data analysis method using conditioned place preference (CPP) in rats

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Conditioned Place Preference (CPP) is a test to evaluate the rewarding effects related to psychological dependence induced by drugs, and is used to clarify the mechanism of drug dependence and to search for the effects of dependence of newly developing drugs with central nervous system effects. In the conditioning of CPP in rats, intraperitoneal or subcutaneous administration is generally used, but oral administration is also required to test article that cannot be dissolved. However, very few reports exist on CPP using oral administration. Therefore, we performed CPP evaluation following oral administration. In our tests, rewarding effects were noted using morphine. Therefore, etizolam, which have been reported to cause dependence in humans, but for which few reports on experiments in animals are available, was evaluated using similarly method and rewarding effects were noted. In this presentation, we report the results of our experiment and propose a new method to analysis data, taking into consideration the effects of individual differences, based on the results obtained so far.