

**P14: EFFECT OF BARAKOL ON THE FORCED SWIMMING BEHAVIOR
IN SOCIAL ISOLATION REARED RATS**

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ABSTRACT

Objective: The aim of the present study was to investigate the behavioural effects of barakol on the forced swimming test in socially and isolation reared rats.

Methods: Male Wistar rats were obtained from weaning, and housed either alone (isolation rearing) or in groups of six rats/cage (social rearing). Six weeks later, these rats were tested for their sensitivity to barakol using the forced swimming test (Porsolt et al., 1978, Eur J Pharmacol 47, 379-391).

Results: The results demonstrated that the forced swimming behavior of the saline-treated isolation reared rats was not significantly difference from the socially reared controls. Sub-chronic administration of barakol (5, 10 and 25 mg/kg i.p.) 24, 5 and 1 h to both isolation and socially reared rats produced the biphasic effects on the forced swimming behavior in the isolation reared rats. Low doses of barakol (5 and 10 mg/kg i.p.) significantly induced antidepressant-like effect (as indicated by decrease the immobility time and increase struggling) ($P < 0.05$) compare with the saline treated controls. However, the effect of higher dose, barakol (25 mg/kg i.p.) on the immobility and struggling time was not significantly difference from the saline treated isolation reared rats ($P > 0.05$). Moreover, the antidepressant-like effect of barakol (5 and 10 mg/kg i.p.) was not observed in the socially reared rats.

Conclusion: These results indicate that barakol has antidepressant-like effect in social isolation rats. Future experiments will need to investigate the mechanism of antidepressant action of barakol in the social isolation reared rats.

Key words: Barakol, forced swimming test, social isolation, rats