

# 电针对慢性应激抑郁模型大鼠脑组织中 大麻素受体 CB1 的影响\*

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**摘要:**目的 观察电针对慢性应激抑郁模型大鼠的大麻素系统 CB1(大麻素受体 1)的影响,探讨电针抗抑郁的作用机理。方法 将 30 只健康雄性 SD 大鼠随机分为空白组、模型组、和电针组,每组 10 只。采用孤养结合慢性轻度不可预见性的应激(CUMS)方法造模。观察各组大鼠的蔗糖水摄入量、旷场试验空间移动量,采用免疫组化法检测大鼠脑组织中大麻素受体 CB1 的表达情况。结果 治疗结束后,三组大鼠蔗糖水摄入量、旷场试验空间移动量比较,模型组均明显低于空白组( $P < 0.01$ ),电针组又均高于模型组( $P < 0.05$ );各组大鼠脑组织中 CB1 表达结果比较,模型组明显低于空白组( $P < 0.01$ );电针组明显高于模型组( $P < 0.05$ )。结论 电针具有明显的抗抑郁作用,其机制可能是通过调节大鼠脑中内源性大麻素受体 CB1 而实现的。

**关键词:**抑郁症;电针;大鼠;内源性大麻素受体

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## Effect of Electroacupuncture on Cannabinoid Receptor CB1 in Brain Tissue of Rats with Chronic Stress Depression

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**Abstract: Objective** To observe the effect of electroacupuncture on cannabinoid system CB1 (cannabinoid receptor 1) in rats with chronic stress depression, and to explore the mechanism of electroacupuncture on anti-depression. **Methods** Thirty healthy male SD rats were randomly divided into blank group, model group and electro-acupuncture group with 10 rats in each group. The model was established by the method of loneliness combined with chronic mild unpredictable stress (CUMS). The sucrose water intake and the space movement of open field test were observed. The expression of cannabinoid receptor CB1 in rat brain tissue was detected by immunohistochemistry. **Results** After treatment, the sucrose water intake and space movement of open field test in three groups were significantly lower in model group than in blank group ( $P < 0.01$ ), and higher in electro-acupuncture group than in model group ( $P < 0.05$ ); the expression of CB1 in brain tissue of rats in model group was significantly lower than that in blank group ( $P < 0.01$ ); the expression of CB1 in brain tissue of rats in the electro-acupuncture group was significantly higher than that in model group ( $P < 0.05$ ). **Conclusion** Electroacupuncture has obvious antidepressant effect, which may be achieved by regulating the endogenous cannabinoid receptor CB1 in rat brain.

**Keywords** depression; electroacupuncture; endogenous cannabinoid receptor