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论文

赛拉嗪对麻醉大鼠海马CA_1区乙酰胆碱含量的影响

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摘要：

应用乙酰胆碱选择性微电极技术,观察到小剂量赛拉嗪(2.0和6.0mg·kg^{-1})可显著增加大鼠海马CA1区ACh的含量,而大剂量赛拉嗪(10.0mg·kg^{-1})及咪唑克生(0.6mg·kg^{-1})则作用相反。咪唑克生虽可明显拮抗赛拉嗪的作用,但海马CA_1区ACh的含量仍显著低于正常水平。在去兰斑核的大鼠上,赛拉嗪(2.0和6.0mg·kg^{-1})及咪唑克生(0.6mg·kg^{-1})分别对海马CA_1区ACh的含量具有减少和增加作用,且咪唑克生拮抗赛拉嗪的作用后,海马CA_1区ACh的含量基本恢复至正常水平。结果提示,赛拉嗪对麻醉大鼠海马CA_1区ACh含量呈双相性影响,咪唑可生虽能显著拮抗赛拉嗪的作用,但海马CA_1区ACh的含量仍明显低于正常水平,可能分别与赛拉嗪和咪唑克生降低或提高中枢NE能系统的功能有关。

关键词： 赛拉嗪 咪唑克生 兰斑核 海马CA1区 乙酰胆碱

EFFECT OF XYLAZINE ON ACETYLCHOLINE CONTENT OF THE HIPPOCAMPAL CA_1 REGION IN URETHANE ANESTHETIZED RATS RGDm8

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Abstract:

By using acetylcholine selective microelectrode technicque,a biphasic effect ofxylazine on acetylcholine content of the hippocampal CA_1 region in urethane anesthetized rats wasobserved as evidenced by the fact that small doses of xylazine2.0 and 6.0 mg·kg^{-1})significantlyincreased,while higher dose(10.0 mg·kg^{-1})decreased the acetylcholine content.Though idazoxan(0.6 mg·kg^{-1}) significantly antagonized the effect of xylazine when used in combination,theacetylcholine content in the hippocampal CA_1 region of urethane anesthetized rats was still much lowerthan that of the control group.In rats whose nucleus locus coeruleus was chemically lesioned,xylazine(2.0 and 6.0 mg·kg^{-1})significantly decreased the acetylcholine content,and idazoxan(0.6mg· kg^{-1}),which increased the acetylcholine content in the hippocampal CA_1 region when usedalone,completely antagonized the effect of xylazine,These results suggest that the biphasic effect ofxylazine and the lower than normal acetylcholine content oherved when idazoxan was used toantagonize xylazine induced changes in acetylcholine content of the hippocampal CA_1 region inurethane anesthetized rats might be related to the effects of xylazine and idazoxan on the centralnoradrenergic neurotransmitter system.

Keywords: Idazoxan Locus ceruleus Acetylcholine Hippocampal CA_1 region Xylazine

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1. 丁日高;黄世杰;杨进生.拟胆碱药物对赛拉嗪镇静效应的拮抗作用[J]. 药学学报, 1993,28(3): 172-176

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