

方药研究

仙茅乙醇提取物对胫骨骨缺损模型
大鼠骨痂、血清 Ca、P 及 AKP 的影响^{*}

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摘要:目的 通过观察仙茅乙醇提取物对大鼠胫骨骨缺损愈合过程中骨痂形成、血清钙(Ca)、血清磷(P)浓度及碱性磷酸酶(AKP)活性的影响,研究仙茅乙醇提取物对大鼠骨折修复的影响。方法 对大鼠实施胫骨骨缺损形成术,将造模成功的大鼠随机分为:模型组、仙茅组、伤科接骨片组,各组再按照不同给药时间点分为3组(第2、4、8周组)。模型组给予等量生理盐水灌胃,仙茅组给予仙茅乙醇提取物灌胃干预,伤科接骨片组给予伤科接骨片灌胃。分别于灌胃后第2、4、8周X射线观察骨痂形成,并测定血清Ca、P浓度及AKP活性。结果 仙茅组大鼠胫骨骨缺损接近消失,骨痂量高于模型组和伤科接骨片组;血清Ca浓度、AKP的活性在各时间点均高于模型组和伤科接骨片组($P < 0.05$);仙茅组大鼠血清P浓度在各时间点均低于模型组和伤科接骨片组($P < 0.05$)。结论 仙茅乙醇提取物对大鼠胫骨骨缺损愈合有一定的疗效。

关键词:开放性骨折;骨痂形成;仙茅乙醇提取物;钙区;磷;碱性磷酸酶
中图分类号:R274.1 文献标识码:A 文章编号:1672-0571(2020)04-0009-05
DOI:10.13424/j.cnki.mtem.2020.04.003

The Influence of Ethanol Extract of Rhizoma Cynanchae on
the Callus of Rats, Serum Ca, P and AKP in Tibial Bone Defect Model

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Abstract: Objective To explore the influence of ethanol extracts of rhizoma cynanchae on the fracture repair in rats through an observaion of the influence of extracts on the porosiss, Serum Ca, P and AKP in the healing process of tibial bone defect in rats. **Method** To carry out tibial bone defect plasty to the rats and randomly divide the successful modeling rats into the model group, ethanol group, and bone joiner group, and each group is further divided into 3 subgroups according to the time of medication(the groups of 2, 4, and 8 weeks). The model group is given the intragastric administration by normal saline; the ethnol group is given the intragastric administration by the extracts ; the last one is given the intragastric administration by Shangke Jiegu Tablets. After the 2, 4 and 8 weeks, the x-ray is used to observe the porosiss and evaluate the Serum Ca, P and AKP. **Result** The tibial defect in rats of the ethanol group almost disappears and the volume of porosiss is higher than the other groups; Serum Ca, P and AKP is higher than the other two groups at various times($p < 0.05$); serum P concentration in the ethnol group is lower than the other two at various times($p < 0.05$). **Conclusion** The ethanol extract of rhizoma cynanchae is effective in treating the tibial defect in rats.

^{*} 基金项目:2017 地方高校陕西省大学生创新创业训练计划项目(2225)
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