

论著

富硒大蒜对实验动物上消化道的刺激作用及对胃液成分的影响

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摘要 背景与目的: 观察灌胃给予富硒大蒜后对大鼠和犬上消化道的刺激作用和对胃液的生化药理学作用。材料与方法: 大鼠和beagle犬连续10 d灌胃给予富硒大蒜液, 并设溶剂对照组和三联抗菌素阳性对照组(阿莫西林、克拉霉素和奥美拉唑), 观察所出现的胃肠道刺激反应, 取其上消化道器官观察受试物对黏膜组织的刺激作用; 取大鼠胃液进行胃酸和胃蛋白酶各项指标的测定。结果: 在1 500 mg/kg和3 750 mg/kg剂量下, 富硒大蒜能明显抑制大鼠胃液游离盐酸、总酸度、胃蛋白酶活性和胃蛋白酶排出量, 增加胃液分泌量; 3 750 mg/kg组还可增加总酸排出量。富硒大蒜对大鼠和犬上消化道黏膜存在轻度刺激作用。在200 mg/kg剂量下, 多次给予富硒大蒜后, 犬的上消化道黏膜存在轻度刺激作用; 而在300 mg/kg和450 mg/kg剂量下, 一次给予富硒大蒜后, 犬的上消化道黏膜即存在中度刺激作用。结论: 富硒大蒜具有改变胃肠内环境, 减少胃液酸度和胃蛋白酶活性, 增加胃液分泌量和刺激上消化道黏膜等作用。

关键词 [富硒大蒜](#); [大鼠](#); [犬](#); [消化道刺激](#); [胃液](#); [胃蛋白酶](#)

Selenium_enriched Garlic on the Gastric Juice Components and Upper Gastrointestinal Tract Stimulation in Experimental Animal

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Abstract BACKGROUND AND AIM: To evaluate the effects of selenium_enriched garlic on the gastric juice components and upper gastrointestinal tract stimulation in rats and beagle dogs. MATERIALS AND METHODS: Selenium_enriched garlic was given to rats and beagle dogs for 10 days, stimulant response of the upper gastrointestinal tract and changes of the mucous membrane, gastric acid and pepsin of rat gastric juice were determined. RESULTS: The free hydrochloric acid, total acidity and activity and volume of pepsin in rats were obviously inhibited. Gastric secretion and total acidity increased at doses of 1 500 mg/kg and 3 750 mg/kg, and total acid output increased at dose of 3 750 mg/kg. There was gentle stimulation on upper gastrointestinal tract mucosa in rats treated with selenium_enriched garlic. There was gentle stimulation on upper gastrointestinal tract mucosa in beagle dogs treated repeatedly with 200 mg/kg selenium_enriched garlic; and medium stimulation in beagle dogs treated with 350 mg/kg and 450 mg/kg once. CONCLUSION: Selenium_enriched garlic could change the stomach intestine environment, suppress gastric acidity and pepsin enzymatic activity, promote gastric secretion and stimulate upper gastrointestinal tract mucosa.

Keywords [Selenium_enriched garlic](#) [rat](#) [dog](#) [gastrointestinal tract stimulation](#) [gastric juice](#) [pepsin](#)

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