



刘建国, 陈海生*, 徐从立, 沈阳. 天冬总皂苷对麻醉犬脑血流量及脑血管阻力的影响[J]. 第二军医大学学报, 2008, 29 (4): 0431-0434

天冬总皂苷对麻醉犬脑血流量及脑血管阻力的影响 [点此下载全文](#)

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基金项目: 国家自然科学基金(20472113).

DOI: 10.3724/SP.J.1008.2008.00431

摘要:

目的: 研究天冬总皂苷灌胃给药对麻醉犬脑血流量(CBF)及脑血管阻力(CVR)的影响。方法: 杂种犬30只, 体重(11±1.5) kg, 雌雄兼用, 随即分为5组(每组6只): 阴性对照组(生理盐水5 mL/kg, 灌胃给药)、阳性对照组(尼莫地平注射液 300 μg/kg, iv)、天冬总皂苷按10、30、60 mg/kg分低中高3个剂量组, 灌胃给药。犬用戊巴比妥钠30 mg/kg静脉注射麻醉, 手术暴露右侧颈总动脉, 用MFV-3200型电磁流量计测定CBF和CVR; MPA3000生物电放大器记录血压(SBP、DBP)和心率(HR)等指标。结果: 与阴性对照组比较, 天冬总皂苷30、60 mg/kg组于给药后5 min即能明显增加CBF并一直持续到120 min (P<0.01), CBF随剂量增加而增加, 显示出有较好的量效关系; 天冬总皂苷30、60 mg/kg组用药后CVR虽较用药前降低, 但大部分时间点未达到统计学显著意义; 天冬总皂苷10 mg/kg组CBF、CVR无明显变化。结论: 天冬总皂苷灌胃给药有显著增加麻醉犬CBF的作用。

关键词: [天冬总皂苷](#) [麻醉](#) [脑血流](#) [脑血管阻力](#) [血压](#) [心率](#)

Influence of total saponins from *Asparagus cochinchinensis* on cerebral blood flow and vascular resistance in anesthetized dogs [Download Fulltext](#)

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Fund Project: Supported by National Natural Science Foundation of China(20472113).

Abstract:

Objective: To study the effect of total saponins on cerebral blood flow and vascular resistance in anesthetized dogs. Methods: Thirty hybrid dogs in either sex, with a body weight of (11±1.5) kg, were evenly randomized into 5 groups: negative control group (saline 5 mL/kg, ig), positive control (nimodipine 300 μg/kg, iv), and 3 groups treated with total saponins (low-dose group [10 mg/kg, ig], middle-dose group [30 mg/kg, ig], and high-dose group [60 mg/kg, ig]). The dogs were anesthetized with intravenous pentobarbital sodium (30 mg/kg). The right common carotid artery was exposed to measure the cerebral blood flow, cerebral vascular resistance, blood pressure and heart rate using the MFV-3200 electromagnetic flow meter and MPA-3000 bioelectricity signal-amplifier. Results: Compared with negative control, cerebral blood flow was significantly increased in animals treated with asparagus root saponins (30 and 60 mg/kg, ig) during 5 and 120 min after drug administration (P<0.01). No significant effect on cerebral blood flow and vascular resistance was found in animals treated with asparagus root saponins (10 mg/kg). Conclusion: Asparagus root saponins can increase cerebral blood flow in anesthetized dogs. [KEY WORDS] total saponins from *Asparagus cochinchinensis*; anesthesia; cerebral blood flow; vascular resistance; blood pressure; heart rate

Keywords: [total saponins from *Asparagus cochinchinensis*](#) [anesthesia](#) [cerebral blood flow](#) [vascular resistance](#) [blood pressure](#) [heart rate](#)

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