



iNOS在血管再狭窄大鼠的表达及黄芪当归的作用

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中文摘要:目的:观察iNOS在血管再狭窄大鼠的表达变化及黄芪、当归的作用。方法:建立内皮剥脱后血管再狭窄动物模型,随机分为对照组、模型组、黄芪治疗组、当归治疗组、黄芪当归联合治疗组;治疗组在造模后给药,连续给药21 d,应用组织形态学、免疫组化的方法分别检测观察术后3、7、14、21 d iNOS在增生内膜中表达变化,并观察中药黄芪、当归注射液单独及联合应用对iNOS表达的影响。结果:正常主动脉内膜和中膜均检测到少量iNOS表达,术后3 d大鼠主动脉壁内膜iNOS表达增强,7~21 d随着损伤时间延长及内膜的逐渐增厚,增生内膜iNOS阳性颗粒的数量增多,颜色变深,21 d达峰值;与模型组比较,黄芪、当归治疗21 d后,iNOS蓝色颗粒明显减少,颜色变浅,以联合应用组作用更为明显。结论:iNOS表达参与内皮损伤后血管再狭窄过程,黄芪、当归可抑制血管内膜损伤后引起的血管内膜增生,其机制可能与抑制iNOS表达有关。

中文关键词:iNOS 血管再狭窄 黄芪 当归

Expression of inducible nitric oxide synthase in restenosis rats and function of *Astragalus membranaceus* and *Angelica sinensis*

Abstract:Objective: To explore the expression of inducible nitric oxide synthase (iNOS) in restenosis rats and function of *Astragalus membranaceus* and *Angelica sinensis*. Method: The restenosis model was established by denuding aorta endothelium, rats were randomly divided into control group, model group, *A. membranaceus* treatment group, *A. sinensis* treatment group, combined *A. membranaceus* with *A. sinensis* treatment group. After intramuscular injection of drugs for 21 days, the changes of iNOS in restenosis rats were observed by histomorphology and immunohistochemistry, the effects of *A. membranaceus* and *A. sinensis* on iNOS in restenosis rats was also investigated. Result: A small quantity of iNOS were detected in the intima and media of normal aorta, the expression of iNOS was increased on 3 day after denuding aorta endothelium, the expression of iNOS increased and the color darkened along with injury damage and intima thickening. Compared with model group, the expression of iNOS decreased in *A. membranaceus*, *A. sinensis* treated group, *A. membranaceus* and *A. sinensis* treated group changed more significantly. Conclusion: iNOS was involved in blood vessel restenosis by denuding aorta endothelium. *A. membranaceus*, *A. sinensis* could inhibit intimal proliferation through iNOS.

keywords: iNOS restenosis *Astragalus membranaceus* *Angelica sinensis*

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