

论著

粉防己碱对高血压心肌肥厚大鼠心肌胶原含量和肌球蛋白ATP酶活性的影响

陆泽安¹, 李庆平¹, 饶曼人^{1*}, 余细勇², 林曙光²

(1. 南京医科大学心血管药理研究室, 江苏 南京 210029; 2. 广东省心血管研究所, 广东 广州 510080)

收稿日期 2000-3-9 修回日期 网络版发布日期 2009-2-24 接受日期 2000-10-17

摘要 观察粉防己碱对高血压心肌肥厚大鼠心肌胶原含量和肌球蛋白ATP酶活性的影响。采用二肾一夹肾血管性高血压造成大鼠左心室肥厚模型, 自术后第9周起按粉防己碱50 mg·kg⁻¹, 依那普利6 mg·g⁻¹灌胃给药, 每日1次, 连续8周。用分光光度法测定心肌羟脯氨酸含量及肌球蛋白ATP酶活性。结果表明左心室肥厚组心肌羟脯氨酸为(5.9±0.3)mg·g⁻¹干重, 明显高于假手术对照组((3.6±0.4) mg·g⁻¹干重), 粉防己碱组和依那普利组心肌羟脯氨酸含量分别较左心室肥厚组低28.2%和39.0%。左心室肥厚组肌球蛋白ATP酶活性仅为(0.43±0.09) mmol Pi·min⁻¹·g⁻¹蛋白质, 较假手术对照组((0.97±0.06) mmol Pi·min⁻¹·g⁻¹蛋白质)明显降低, 而粉防己碱组和依那普利组则分别比左心室肥厚组高60.5%和118.6%。实验结果表明粉防己碱可部分逆转肾血管性高血压所致的大鼠左心室肥厚, 降低心肌胶原含量, 升高肌球蛋白ATP酶活性。

关键词 [粉防己碱](#) [依那普利](#) [胶原](#) [肌球蛋白ATP酶](#) [高血压](#), [肾血管性](#) [心脏肥厚](#)

分类号 [R972.4](#)

Effects of tetrandrine on hydroxyproline content and myosin ATPase activity of hypertrophied myocardium in renovascular hypertensive rats

LU Ze-An¹, LI Qing-Ping¹, RAO Man-Ren^{1*}, YU Xi-Yong², LIN Shu-Guang²

(1. Department of Cardiovascular Pharmacology, Nanjing Medical University, Nanjing 210029, China; 2. Institute for Cardiovascular Diseases of Guangdong Province, Guangzhou 510080, China)

Abstract

To study the effects of tetrandrine (Tet) on hypertrophied myocardial hydroxyproline content and myosin ATPase activity, left ventricular hypertrophy(LVH) was induced by renovascular hypertension (two-kidney, one-clip) in rats. Eight weeks after operation Tet 50 mg·kg⁻¹·d⁻¹ and enalapril(Ena) 6 mg·kg⁻¹·d⁻¹ were given by gavage for 8 weeks. The results showed that hydroxyproline content in LVH group was much higher than that of sham-operated one ((5.9±0.3) vs (3.6±0.4) mg·g⁻¹ dry weight), and was decreased by 28.2% and 39.0% in Tet and Ena groups, respectively. Myosin ATPase activity in LVH group was much lower than that of sham-operated group ((0.43±0.09) vs (0.97±0.06) mmol Pi·min⁻¹·g⁻¹ protein, P<0.01). In Tet and Ena groups they were 60.5% and 118.6% higher than that of LVH group, respectively. The results suggest that Tet or Ena partially reduce the hydroxyproline content and elevate myosin ATPase activity of hypertrophied myocardium in renovascular hypertensive rats.

Key words [tetrandrine](#) [enalapril](#) [collagen](#) [myosin ATPase](#) [hypertension](#) [renovascular](#) [heart hypertrophy](#)

DOI:

通讯作者 饶曼人 Raomanren@263.com

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(149KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“粉防己碱” 的相关文章](#)
- ▶ [本文作者相关文章](#)

- [陆泽安](#)
- [李庆平](#)
- [饶曼人](#)
- [余细勇](#)
- [林曙光](#)