

# 山东大学学报 (医学版)

## Journal of Shandong University (Health Sciences)

您的位置：山东大学 (<http://www.sdu.edu.cn/>) -> 科技期刊社 (<http://njournal.sdu.edu.cn/>) -> 《山东大学学报 (医学版)》

[山东大学学报 \(医学版\)](http://yxbwk.njournal.sdu.edu.cn) (<http://yxbwk.njournal.sdu.edu.cn>) >> 2014

(<http://yxbwk.njournal.sdu.edu.cn/CN/article/showTenYearVolumnDetail.do?nian=2014>), Vol. 52

(<http://yxbwk.njournal.sdu.edu.cn/CN/article/showTenYearVolumnDetail.do?nian=2014>) >> Issue (10)

([http://yxbwk.njournal.sdu.edu.cn/CN/volumn/volumn\\_122.shtml](http://yxbwk.njournal.sdu.edu.cn/CN/volumn/volumn_122.shtml)): 49-54. doi: [10.6040/j.issn.1671-7554.0.2014.279](https://doi.org/10.6040/j.issn.1671-7554.0.2014.279) (<https://doi.org/10.6040/j.issn.1671-7554.0.2014.279>)

• 临床医学 •

◀ [上一篇](http://yxbwk.njournal.sdu.edu.cn/CN/abstract/abstract3117.shtml) (<http://yxbwk.njournal.sdu.edu.cn/CN/abstract/abstract3117.shtml>) [下一篇](http://yxbwk.njournal.sdu.edu.cn/CN/abstract/abstract3119.shtml) ▶

(<http://yxbwk.njournal.sdu.edu.cn/CN/abstract/abstract3119.shtml>)

原发性高血压患者血清IMD、CysC、FGF23与动脉粥样硬化的关系

李静, 徐彤彤, 余帆 ▼

Correlation of serum IMD, CysC and FGF23 with atherosclerosis in essential hypertensive

LI Jing, XU Tongtong, YU Fan ▼



PDF (PC)

64

摘要/Abstract

**摘要：** **目的** 探讨联合检测血清中叶素 (IMD)、胱抑素C (CysC)、成纤维细胞生长因子23 (FGF23) 与原发性高血压 (EH) 患者动脉粥样硬化 (AS) 的关系。**方法** 选择EH患者60例 (EH组) 及健康体检者60例 (对照组), 应用高分辨二维超声技术测量颈动脉内膜中层厚度 (cIMT) 评估AS程度, 采用酶联免疫吸附法 (ELISA) 测血清IMD、CysC及FGF23水平, 同时检

测相关生化指标。**结果** ①EH组cIMT及血清IMD、CysC、FGF23水平高于对照组 ( $P<0.05$ ) ; ②不同级别高血压患者cIMT及血清IMD、CysC、FGF23水平随血压分级升高而递增 ( $P<0.05$ ) ; ③以cIMT为依据将患者分为cIMT正常组、cIMT增厚组及斑块形成组, 血清IMD、CysC、FGF23水平随cIMT增厚而升高, 3组患者血清IMD、CysC、FGF23水平比较, 差异有统计学意义 ( $P<0.001$ ) ; ④cIMT与IMD、CysC、FGF23呈正相关 ( $r=0.770、0.616、0.822, P<0.001$ ) , 进一步行非条件Logistic回归分析显示, 收缩压 (SBP)、IMD、CysC、FGF23、高密度脂蛋白 (HDL) 是cIMT增厚的独立危险因素 ( $OR=1.104、1.120、1.107、1.069、3.592, P<0.05$ ) 。**结论** 血清IMD、CysC及FGF23水平与血压分级和cIMT密切相关, 是cIMT增厚的独立危险因素, 三者可能参与了EH的发生发展, 并影响AS的进程。联合检测EH患者血清IMD、CysC及FGF23水平可在一定程度上反映AS情况, 为AS的防治提供新思路。

**关键词:** 中叶素, 成纤维细胞生长因子23, 动脉粥样硬化, 高血压, 胱抑素C

**Abstract: Objective** To analyze the association between serum intermedin (IMD), Cystatin C (CysC) and fibroblast growth factor 23 (FGF23) with atherosclerosis (AS) in essential hypertensive (EH). **Methods** Serum IMD, CysC and FGF23 levels of 60 patients with EH (EH group) and 60 healthy subjects (control group) were detected with enzyme-linked immunosorbent assay (ELISA). The carotid intima media thickness (cIMT) was measured with UCG. **Results** The cIMT, serum IMD, CysC and FGF23 levels were significantly higher in EH group than in control group ( $P<0.05$ ). In EH patients, cIMT, serum IMD, CysC and FGF23 levels increased with elevated blood pressure levels ( $P<0.05$ ). Based on the level of cIMT, all subjects were divided into normal cIMT group, thickened cIMT group and mottling formation group. The serum IMD, CysC and FGF23 levels in the three groups rose with cIMT, and the difference had statistical significance ( $P<0.001$ ). The cIMT level was positively correlated with serum IMD, CysC and FGF23 levels ( $r=0.770, 0.616, 0.822; P<0.001$ ). When cIMT level was taken as the dependent variable, unconditioned Logistic regression analysis showed that SBP, IMD, CysC, FGF23, and HDL were independent risk factors for cIMT ( $OR=1.104, 1.120, 1.107, 1.069, 3.592; P<0.05$ ). **Conclusion** Serum IMD, CysC and FGF23 levels are closely associated with blood pressure classification and cIMT, indicating that they are independent risk factors of cIMT. They may participate in the pathogenesis of EH and affect the process of AS. Combined-detection of serum IMD, CysC and FGF23 can reflect the severity of AS and provide a new approach for its prevention and treatment.

**Key words:** Intermedin, Fibroblast growth factor 23, Hypertension, Cystatin C, Atherosclerosis

**中图分类号:**

R544.11

参考文献

相关文章 15

多维度评价

本文评价

推荐阅读 0

版权所有 © 2018 《山东大学学报(医学版)》编辑部

地址:山东大学科技期刊社(济南市历城区山大南路27号山东大学中心校区明德楼B座721室)电

话: 0531-88366918 E-mail: xbyxb@sdu.edu.cn

本系统由北京玛格泰克科技发展有限公司 (<http://www.magtech.com.cn>)设计开发