

论著

血浆髓过氧化物酶水平与冠状动脉病变严重程度及侧支循环的关系

搜索

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摘要

目的: 观察髓过氧化物酶(myeloperoxidase, MPO)在稳定性心绞痛(stable angina pectoris, SAP)患者血浆中的表达, 分析其与冠状动脉病变严重程度及侧支循环形成的关系。方法: 收集160例中南大学湘雅医院心内科行选择性冠状动脉造影术的SAP患者, 以Gensini评分为标准对冠状动脉病变严重程度分级, 其中评分 ≥ 50 分为重症组($n=72$), < 50 分为轻症组($n=88$); 其中至少一支主要冠状动脉狭窄 $\geq 90\%$ 患者62例, 按照Rentrop法对其冠状动脉侧支循环评分, 将0级、1级设为侧支循环不良组($n=27$), 2级、3级设为侧支循环良好组($n=35$)。在冠状动脉造影前取血, 酶联免疫吸附法(enzyme linked immunosorbent assay, ELISA)测定上述病人MPO水平。结果: Gensini评分重症组血浆MPO水平 $[(7.76 \pm 1.08) \text{ ng/mL}]$ 显著高于评分轻症组 $[(4.39 \pm 0.99) \text{ ng/mL}]$ ($P < 0.05$)。相关性分析发现MPO水平与冠心病Gensini积分呈正相关($R^2=0.582$, $P < 0.01$)。侧支循环形成不良组MPO浓度 $[(6.19 \pm 0.92) \text{ ng/mL}]$ 高于侧支循环良好组 $[(4.32 \pm 0.80) \text{ ng/mL}]$ ($P < 0.05$), 相关性分析发现血浆MPO水平与冠脉侧支循环Rentrop分级呈负相关($R^2=0.427$, $P < 0.01$)。结论: 稳定性心绞痛患者血浆MPO水平与冠状动脉Gensini积分呈正相关, 与Rentrop分级呈负相关, 其水平升高反映冠状动脉侧支循环的形成不良。

关键词: [稳定性心绞痛](#); [髓过氧化物酶](#); [冠脉病变程度](#); [侧支循环](#)

Relationship between myeloperoxidase levels and coronary lesion severity or coronary

Relationship between coronary lesion severity and coronary collateral circulation formation in patients with stable angina pectoris

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Abstract

Objective: To examine the plasma levels of myeloperoxidase (MPO) in patients with stable angina pectoris (SAP), and to analyze the relationship between MPO levels and severity of SAP or coronary collateral circulation (CCC) formation. **Methods:** A total of 160 SAP patients, who were performed coronary angiography from Department of Cardiology, Xiangya Hospital, Central South University, were enrolled in this study. According to Gensini scoring system, the patients were divided into a severe group (coronary stenosis ≥ 50 , $n=72$) and a mild group (coronary stenosis < 50 , $n=88$). Among them, 62 patients showed the degree of coronary stenosis were $\geq 90\%$. According to Rentrop classification method, the patients with CCC level 0 or 1 were assigned to a poor CCC group ($n=27$), while the patients with CCC level 2 or 3 were assigned to a good CCC group ($n=35$). Blood samples were drawn from all patients before coronary angiography, and the plasma MPO levels were detected by enzyme linked immunosorbent assay (ELISA). **Results:** The plasma MPO levels were significant increased in the severe group compared to that in the mild group [(7.76 \pm 1.08) vs (4.39 \pm 0.99) ng/mL, $P<0.05$]. The plasma MPO levels might be positively correlated with Gensini scoring system ($R^2=0.582$, $P<0.01$). The plasma MPO levels in the poor CCC group were significantly elevated compared to that in the good CCC group [(6.19 \pm 0.92) vs (4.32 \pm 0.80) ng/mL, $P<0.05$]. The plasma MPO levels were negatively correlated to Rentrop classification ($R^2=0.427$, $P<0.01$). **Conclusion:** The plasma MPO levels might be positively correlated to the Gensini scoring system, while it might be negatively correlated to the Rentrop classification in SAP patients. The elevated plasma MPO levels might indicate the poor CCC formation.

Keywords:

[stable angina pectoris](#)

[myeloperoxidase](#)

[degree of coronary lesion](#)

[collateral circulation](#)

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