

论著

基质金属蛋白酶-9及其组织抑制物-1与颈动脉粥样斑块稳定性相关研究

高峰,宋水江△,吴继敏,闻树群,钟国栋

浙江大学医学院附属第二医院神经内科,浙江 杭州 310009

收稿日期 2005-12-18 修回日期 2006-4-17 网络版发布日期 2008-8-24 接受日期 2006-4-17

摘要 目的:探讨基质金属蛋白酶-9(MMP-9)、基质金属蛋白酶抑制物-1(TIMP-1)、MMP-9/TIMP-1与脑梗死患者颈动脉粥样斑块稳定性的相关性。方法:80例动脉粥样硬化性脑梗死患者按TCD微栓子检测结果分为微栓子阴性组70例和微栓子阳性组10例,20例正常人作为对照组,分别测定血浆MMP-9、TIMP-1水平。结果:脑梗死患者血浆MMP-9、TIMP-1水平明显高于正常对照组($P<0.01$),相关性分析发现MMP-9水平与TIMP-1水平呈正相关($r=0.76, P<0.01$)。MMP-9/TIMP-1比值仅在微栓子阳性组明显增高。结论:血浆MMP-9参与了脑梗死的病理生理过程,血浆MMP-9和MMP-9/TIMP-1与颈动脉粥样斑块的不稳定性呈正相关。

关键词 [脑梗塞](#) [颈动脉粥样硬化斑块](#) [明胶酶B](#); [金属蛋白酶1组织抑制物](#)

分类号 [r363](#)

Relationship between matrix metalloproteinase-9 and tissue metalloproteinase inhibitor-1 and carotid atheromatous plaque stability

GAO Feng,SONG Shui-jiang,WU Ji-min,WEN Shu-qun,ZHONG Guo-dong

Department of Neurology,The Second Affiliated Hospital,Zhejiang University School of Medicine, Hangzhou 310009,China.E-mail: shuijiangs@yahoo.com.cn

Abstract

AIM: To investigate the correlation between matrix metalloproteinase-9 (MMP-9),tissue metalloproteinase inhibitor-1 (TIMP-1),MMP-9/TIMP-1 and carotid atheromatous plaque stability in cerebral infarction patients.
METHODS: 80 patients with cerebral infarction were categorized as microemboli-negative group (n=70) and microemboli-positive group (n=10),20 normal human were served as control group.The MMP-9 and TIMP-1 levels in plasma were determined by mean of ELISA in 3 groups.
RESULTS: The levels of MMP-9 and TIMP-1 in plasma were significantly higher in cerebral infarction patients than those in control group ($P<0.01$).The plasma MMP-9 content was positively correlated with TIMP-1 content ($r=0.76, P<0.01$).The ratio of MMP-9/TIMP-1 increased only in microemboli-positive patients ($P<0.01$).
CONCLUSION: The results indicate that the plasma MMP-9 participates in pathophysiological process of cerebral infarction.The ratio of MMP-9/TIMP-1 shows a close relationship with carotid atheromatous plaque instability.

Key words [Brain infarction](#) [Carotid atheromatous plaque](#) [Gelatinase B](#) [Tissue-inhibitor of metalloproteinase-1](#)

DOI: 1000-4718

通讯作者 宋水江 shuijiangs@yahoo.com.cn

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(417KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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“脑梗塞”的相关文章](#)
- ▶ [本文作者相关文章](#)

- [高峰](#)
- [宋水江](#)
- [吴继敏](#)
- [闻树群](#)
- [钟国栋](#)