

论著

Ezrin和E-cadherin在鼻咽癌组织中的表达及意义

王龙云¹, 高叶梅², 涂青松¹, 洪继东¹

1.中南大学湘雅医院肿瘤科, 长沙 410008; 2.湖南省邵阳市中心医院血液肿瘤科, 湖南 邵阳 422000

摘要:

目的: 检测鼻咽癌组织中埃兹蛋白(Ezrin)及上皮细胞钙黏蛋白(E-cadherin)的表达情况, 探讨它们与肿瘤侵袭、转移及预后的关系。方法: 应用免疫组织化学SP法检测Ezrin及E-cadherin蛋白在42例鼻咽癌组织和10例鼻咽炎性组织中的表达情况。结果: 鼻咽癌组织中Ezrin 蛋白的表达显著高于鼻咽炎性组织 ($P<0.05$), 而鼻咽癌组织中E-cadherin蛋白的表达显著低于鼻咽炎性组织 ($P<0.05$)。Ezrin和E-cadherin蛋白在鼻咽癌组织中的表达均与鼻咽癌的T分期、颈淋巴结转移、临床分期密切相关 ($P<0.05$)。Ezrin与E-cadherin在鼻咽癌组织中的表达呈明显负相关($r=-0.450$, $P<0.05$); 生存分析显示Ezrin阳性表达、肿瘤TNM分期、E-cadherin表达下调及有淋巴结转移者与鼻咽癌患者的生存率有关 ($P<0.05$)。结论: Ezrin和E-cadherin在鼻咽癌组织中的表达呈明显的负相关。Ezrin和E-cadherin与鼻咽癌临床分期、淋巴结转移有关, 有可能作为鼻咽癌的重要肿瘤标志物。联合检测Ezrin和E-cadherin的表达水平, 可能为鼻咽癌预后判断提供依据。

关键词: 鼻咽癌 埃兹蛋白 上皮细胞钙黏蛋白 预后

Expression of Ezrin and E-cadherin in nasopharyngeal carcinoma and its significance

WANG Longyun¹, GAO Yemei², TU Qingsong¹, HONG Jidong¹

1.Department of Oncology, Xiangya Hospital, Central South university, Changsha 410008;
2. Department of Hematology and Oncology, Central Hospital of Shaoyang, Shaoyang Hunan 422000, China

Abstract:

Objective To explore the association of Ezrin and E-cadherin expression with the invasion, metastasis and prognosis of nasopharyngeal carcinoma. Methods Immunohistochemical SP staining was used to detect the expression of Ezrin and E-cadherin in 42 nasopharyngeal carcinoma and 10 chronic nasopharyngitis specimens. Results Ezrin protein expression in the nasopharyngeal carcinoma tissues was significantly higher than that in the chronic nasopharyngitis tissues ($P<0.05$). E-cadherin expression in the nasopharyngeal carcinoma tissues was significantly lower than that in the chronic nasopharyngitis tissues ($P<0.05$). Expressions of both Ezrin and E-cadherin of nasopharyngeal carcinoma were closely associated with T staging, the cervical lymph node metastases and clinical staging ($P<0.05$). A negative correlation was found between Ezrin and E-cadherin expression in the nasopharyngeal carcinoma tissues ($r=-0.450$, $P<0.05$). Survival analysis showed that the abnormal expression of Ezrin and E-cadherin, clinical staging and the cervical lymph node metastases were associated with the survival rate of patients with nasopharyngeal carcinoma. Conclusion A negative correlation is found between Ezrin and E-cadherin expression in the nasopharyngeal carcinoma tissues. Ezrin and E-cadherin are closely related to clinical staging and the cervical lymph node metastases of nasopharyngeal carcinoma, suggesting that they may be important tumor markers for nasopharyngeal carcinoma. Combined detection of the expressions of Ezrin and E-cadherin is helpful for clinical doctors to determine the prognosis of patients with nasopharyngeal carcinoma.

Keywords: nasopharyngeal carcinoma; Ezrin; E-cadherin; prognosis

收稿日期 2010-04-06 修回日期 网络版发布日期

DOI: 10.3969/j.issn.1672-7347.2010.

基金项目:

通讯作者: 洪继东

作者简介:

作者Email: hongjldong1966@126.com

扩展功能

本文信息

- Supporting info
- PDF(1607KB)
- [HTML全文]
- 参考文献[PDF]
- 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
- 引用本文
- Email Alert
- 文章反馈
- 浏览反馈信息

本文关键词相关文章

- 鼻咽癌
- 埃兹蛋白
- 上皮细胞钙黏蛋白
- 预后

本文作者相关文章

PubMed

参考文献:

- [1] Tao Y, Bidault F, Bosq J, et al. Distant metastasis of undifferentiated carcinoma of nasopharyngeal type [J]. *Onkologie*, 2008, 31(11): 574-575.
- [2] Chou J, Lin Y C, Kim J, et al. Nasopharyngeal carcinoma--review of the molecular mechanisms of tumorigenesis [J]. *Head Neck*, 2008, 30(7): 946-963.
- [3] Musia J, Sporny S, Nowicki A. Prognostic significance of E-cadherin and ezrin immunohistochemical expression in prostate cancer [J]. *Pol J Pathol*, 2007, 58(4): 235-243.
- [4] Federici C, Brambilla D. Pleiotropic function of ezrin in human metastatic melanomas [J]. *Int J Cancer*, 2009, 124(12): 2804-2812.
- [5] Bornman D M, Mathew S, Alsrnhe J, et al. Methylation of the E-cadherin gene bladder neoplasia and in normal urothelial expression from elderly individuals [J]. *Am J Pathol*, 2001, 159(3): 831-835.
- [6] Gonzalez M A, Pinder S E, Wencyk P M, et al. An immunohistochemical examination of the expression of E-cadherin, α and β/γ -catenins, and α 2 and β 1 integrins in invasive breast cancer [J]. *J Pathol*, 1999, 187(5): 523-529.
- [7] 范松青, 张文玲, 徐丽娜, 等. 组织微阵列技术研究转移相关基因在鼻咽癌中的表达与临床意义 [J]. *生物化学与生物物理进展*, 2009, 36(5): 616-623.
- WANG Songqing, ZHANG Wenling, XU Lina, et al. Investigation of clinical significance and expression of tumor metastasis-related genes in nasopharyngeal carcinoma using tissue microarray technique [J]. *Progress in Biochemistry and Biophysics*, 2009, 36(5): 616-623.
- [8] Peng S, Fan S, Li X, et al. The expression of ezrin in NPC and its interaction with NGX6, a novel candidate suppressor [J]. *Cancer Sci*, 2007, 98(3): 341-349.
- [9] 马丽娟, 田勇泉, 肖健云, 等. Fascin1和E-cadherin在鼻咽癌组织中表达与意义 [J]. *肿瘤学杂志*, 2006, 12(3): 194-196.
- MA Lijuan, TIAN Yongquan, XIAO Jiangyun, et al. Expression of Fascin1 and E-cadherin in nasopharyngeal carcinoma and their significance [J]. *Journal of Oncology*, 2006, 12(3): 194-196.
- [10] Martin T A, Harrison G, Mansel R E, et al. The role of the CD44/ezrin complex in cancer metastasis [J]. *Crit Rev Oncol Hematol*, 2003, 46(2): 165-186.
- [11] Hunter K W. Ezrin, a key component in tumor metastasis [J]. *Trends Mol Med*, 2004, 10(5): 201-204.
- [12] Pouillet P, Gautreau A, Kadare G, et al. Ezrin interacts with focal adhesion kinase and induces its activation independently of cellmatrix adhesion [J]. *Biol Chem*, 2001, 276(40): 37686-37691.
- [13] Khanna C, Wan X, Bose S, et al. The membrane-cytoskeleton linker ezrin is necessary for osteosarcoma metastasis [J]. *Nat Med*, 2004, 10(2): 182-188.
- [14] Yu Y, Khan J, Khanna C, et al. Expression profiling identifies the cytoskeletal organizer ezrin and the developmental homeoprotein Six-1 as key metastatic regulators [J]. *Nat Med*, 2004, 10(2): 175-256.
- [15] 李琼, 吴明富, 宋安萍, 等. 浸润性乳腺导管癌组织中Ezrin和钙粘素E的表达与淋巴结转移的关系 [J]. *癌症*, 2006, 25(3): 363-366.
- LI Qiong, WU Mingfu, SONG Anping, et al. Expression of Ezrin and E-cadherin in invasive ductal breast cancer and their correlations to lymphatic metastasis [J]. *Chinese Journal of Cancer*, 2006, 25(3): 363-366.
- [16] Zheng Z, Pan J, Chu B, et al. Down regulation and abnormal expression of E-cadherin and beta-catenin in nasopharyngeal carcinoma [J]. *Hum Pathol*, 1999, 30(4): 458-466.
- [17] Hiscox S, Jiang W G. Ezrin regulates cell-cell and cellmatrix adhesion, a possible role with E-cadherin / β -catenin [J]. *J Cell Sci*, 1999, 112(18): 3081-3090.
- [18] Pujuguet P, Del Maestro L, Gautreau A, et al. Ezrin regulates E-Cadherin-dependent adherens junction assembly through Rac1 activation [J]. *Mol Biol Cell*, 2003, 14(5): 2181-2191.

本刊中的类似文章

1. 罗晨, 何小鹃, 赵艳, 张志杰, 李官成. 人源性鼻咽癌抗独特型单链抗体基因G22真核表达载体的构建及表达鉴定 [J]. *中南大学学报(医学版)*, 2008, 33(01): 16-20
2. 洪继东, 廖遇平, 袁君, 魏瑞, 王学伟, 毛海娇. 44例儿童青少年鼻咽癌临床和预后分析 [J]. *中南大学学报(医学版)*, 2008, 33(08): 723-726
3. 钟宇, 唐瑶云, 谢常宁, 赵素萍. HRE1.Egr-1.yCDglyTK融合自杀基因前药系统对鼻咽癌放射增敏作用的体外实验 [J]. *中南大学学报(医学版)*, 2008, 33(02): 110-114
4. 曾朝阳, 熊炜, 李小玲, 张必成, 李桂源. 鼻咽癌相关基因文献数据库的建立及分析 [J]. *中南大学学报(医学版)*, 2003, 28(1): 1-
5. 侯德富, 贺智敏, 杨芳, 陈主初. 人鼻咽上皮细胞CYP2E1 cDNA克隆及序列分析 [J]. *中南大学学报(医学版)*, 2003, 28(2): 107-
6. 徐婧, 邱元正, 唐瑶云, 田勇泉, 肖献忠, 赵素萍.

VP3对鼻咽癌细胞CNE-2细胞株的体外杀伤效应

[J]. 中南大学学报(医学版), 2006, 31(05): 706-709

7. 彭芳, 汤参娥, 李茂玉, 李萃, 程爱兰, 李峰, 张鹏飞, 李美香, 肖志强, 陈主初.应用激光捕获显微切割技术纯化的

鼻咽癌蛋白质表达谱的建立[J]. 中南大学学报(医学版), 2009,34(06): 481-486

8. 周蓉蓉¹, 陈嘉¹, 肖志强².E1A基因对人鼻咽癌动物模型放射增敏的实验研究[J]. 中南大学学报(医学版), 2009,34(08): 744-751

9. 张莹莹¹, 林娟¹, 周卫兵¹, 唐劲天², 廖遇平¹.鼻咽癌调强适形放射治疗的临床剂量及疗效观察[J]. 中南大学学报(医学版), 2009,34(09): 879-885

10. 童永清, 黄建, 周国华, 李跃辉, 胡锦涛, 李官成.鼻咽癌患者血清中自身抗体的初步检测[J]. 中南大学学报(医学版), 2008,33(03): 233-237

11. 易红, 程爱兰, 黄卫国, 张鹏飞, 李茂玉, 彭芳, 李峰, 李萃, 陈主初, 肖志强.应用激光捕获显微切割和蛋白质组学技术筛选

鼻咽癌的差异表达蛋白质[J]. 中南大学学报(医学版), 2008,33(05): 375-383

12. 李小玲, 武明花, 李桂源.鼻咽癌易感/抑瘤基因的功能基因组学研究[J]. 中南大学学报(医学版), 2008,33(07): 553-558

13. 周文¹, 李虹¹, 冯湘玲¹, 王磊¹, 祝斌¹, 李辉¹, 姚开泰^{1,2}, 任彩萍¹.利用RNA干扰技术研究PTX1在鼻咽癌中的功能[J]. 中南大学学报(医学版), 2007,32(02): 235-240

14. 李和清, 褚玉敏, 陈江波, 谭国林.鼻咽癌的基因不稳定性[J]. 中南大学学报(医学版), 2007,32(03): 417-421

15. 陈嘉.四联液防治鼻咽癌患者放射性口腔黏膜

反应的效果及其机制[J]. 中南大学学报(医学版), 2007,32(03): 527-530