

## PTEN、MMP27、VEGF在骨巨细胞瘤中的表达

陈述伟<sup>1</sup>, 杨述华<sup>1</sup>, 张劲松<sup>1</sup>, 朱续胜<sup>1</sup>, 袁永辉<sup>2</sup>

1. 430022 武汉, 华中科技大学同济医学院附属协和医院骨科; 2. 华中科技大学同济医学院病理科

### Expressions of PTEN and MMP-7、VEGF in Giant Cell Tumor of Bone (GCT)

CHEN Shu-wei<sup>1</sup>, YANG Shu-hua<sup>1</sup>, ZHANG Jing-song<sup>1</sup>, ZHU Xu-sheng<sup>1</sup>, YUAN Yong-hui<sup>2</sup>

1. Department of Orthopaedics, Xiehe Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430022, China; 2. Department of Pathology, Tongji Medical College, Huazhong University of Science and Technology

- 摘要
- 参考文献
- 相关文章

全文: PDF (181 KB) HTML (0 KB) 输出: BibTeX | EndNote (RIS) 背景资料

**摘要** 目的 探讨骨巨细胞瘤中的PTEN、MMP-7、VEGF表达与“三结合分类”、病理分级及复发、转移的关系。方法 采用免疫组化法检测65例骨巨细胞瘤标本中PTEN、MMP-7、VEGF基因蛋白的表达,分析其与骨巨细胞瘤临床病理分期、分级及复发、转移的关系。结果 PTEN、MMP-7、VEGF的阳性表达率分别为56.95%、72.30%、49.20%;在“三结合分类”组中PTEN的阳性表达率分别为83.3%、68.10%、28.00%,呈下降趋势,良性与中间性组间差异不显著(P=0.271),而中间性与恶性组间差异明显(P=0.001);而MMP-7阳性表达率分别为39.00%、72.50%、96.00%,VEGF阳性表达率分别为16.67%、54.50%、68.00%,组间差异明显(P=0.031、0.001);在转移组中PTEN、MMP-7、VEGF的阳性表达率分别为30.00%、100%、85.00%,在无转移组中PTEN、MMP-7、VEGF的阳性表达率分别为68.80%、60.00%、33.3%,两组间差异明显(P=0.003、0.001、0.001);复发组中PTEN、MMP-7、VEGF的阳性表达率分别为33.30%、93.30%、86.60%,无复发组中PTEN、MMP-7、VEGF的阳性表达率分别为64.00%、66.00%、38.00%,两组间差异明显(P=0.035、0.038、0.001),且PTEN与MMP-7、VEGF负相关(P=0.001、0.020),而与病理分级及年龄、性别无统计学差异。结论 PTEN、MMP-7、VEGF的表达与“三结合分类”有一定的关系,并与转移、复发显著相关,联合检测有助于骨巨细胞瘤的临床评估,对其预后判断具有重要临床意义。

**关键词:** 骨巨细胞瘤 PTEN MMP-7 VEGF 免疫组织化学

**Abstract:** Objective To evaluate the expressions of PTEN (phosphatase and tension homologue deleted on chromosome 10), MMP-7 (matrix metalloproteinases-7, MMP-7), VEGF (vascular endothelial growth factor) and their relationships with clinical factors, pathological types and metastasis, recurrence of giant cell tumor of bone (GCT). Methods The expressions of PTEN, MMP-7, VEGF in 65 cases of human GCT were detected by using immunohistochemical staining. The expressions of PTEN, MMP-7, VEGF and other clinical fractures were analyzed with the metastasis and recurrence of the tumor. Results The expressions of the PTEN, MMP-7, VEGF in GCT were 56.95% and 72.30%, 49.20%, respectively. In the clinical-pathological-X-ray groups, the expressions of PTEN were 83.30%, 68.10%, 28.00%, the positive rate had no significantly difference between the Non2malignant and doubtful-malignant groups,  $P > 0.05$  ( $P = 0.271$ ), but there were significantly difference between the doubtful-malignant and malignant groups,  $P < 0.05$  ( $P = 0.001$ ); the expression of MMP-7 were 39.00%, 72.50%, 96.00%, and the expression of VEGF were 16.67%, 54.50%, 68.00%, the positive rates of them had significantly difference,  $P < 0.05$  ( $P = 0.031, 0.001$ ); the expressions of PTEN, MMP-7, VEGF in the recurrence group were 33.30%, 93.30%, 86.60%, but in the nonrecurrence group were 64.00%, 66.00%, 38.00%, their expressions were statistically related to the recurrence of GCT,  $P < 0.05$  ( $P = 0.035, 0.038, 0.001$ ); in the metastasis group, the expressions of PTEN, MMP-7, VEGF were 30.00%, 100%, 85.00%, in the no metastasis group, the positive rates of PTEN, MMP-7, VEGF were 68.80%, 60.00%, 33.30%, the positive rates of them had significantly difference,  $P < 0.05$  ( $P = 0.003, 0.001, 0.001$ ); at the same time, The expression of PTEN in GCT was inversely correlated with the expressions of VEGF and MMP-7,  $P < 0.05$  ( $P = 0.001, 0.02$ ); However, the expressions of PTEN, MMP-7, VEGF had no statistically significance with the pathological types and sexuality. Conclusion The decreased expression of PTEN and increased expressions of MMP-7, VEGF have significant relationship to the prognosis of GCT. The combined detection of PTEN and MMP-7 may be of important clinical value to evaluate the infiltrative

#### 服务

把本文推荐给朋友  
加入我的书架  
加入引用管理器  
E-mail Alert  
RSS

#### 作者相关文章

陈述伟  
杨述华  
张劲松  
朱续胜  
袁永辉

引用本文:

陈述伟,杨述华,张劲松等. PTEN、MMP27、VEGF在骨巨细胞瘤中的表达[J]. 肿瘤防治研究, 2007, 34(4): 290-292.

CHEN Shu-wei, YANG Shu-hua, ZHANG Jing-song et al. Expressions of PTEN and MMP-7、VEGF in Giant Cell Tumor of Bone ( GCT)[J]. CHINA RESEARCH ON PREVENTION AND TREATMENT, 2007, 34(4): 290-292.

没有本文参考文献

- [1] 王小莉;龚兴牡. Trx-1和COX-2在非小细胞肺癌中的表达及意义[J]. 肿瘤防治研究, 2012, 39(2): 166-168.
- [2] 孙军;胡俊波;陈洪雷;李蓓芸;夏和顺. 不同宫颈组织中PIK3CA、PTEN和p16蛋白表达及其与HPV16/18感染的关系[J]. 肿瘤防治研究, 2012, 39(2): 189-194.
- [3] 王湘漪;袁艳华;宛凤玲;严颖;任军. 胸腔内免疫治疗、化疗对恶性胸水免疫指标的影响 [J]. 肿瘤防治研究, 2012, 39(2): 198-200.
- [4] 张冠军;梁华;王春宝;张学斌;王一理. NDRG-1及MMP-7在肾细胞瘤中的表达及意义[J]. 肿瘤防治研究, 2012, 39(1): 54-58.
- [5] 孙建建;李胜棉;赵松;李光辉;王小玲. Survivin和Caspase-3在胰腺癌组织中的表达及与预后的关系[J]. 肿瘤防治研究, 2012, 39(1): 62-67.
- [6] 成志勇;潘岐;郭宗伟;任建伟. PTEN: 白血病防治新靶点[J]. 肿瘤防治研究, 2012, 39(1): 105-109.
- [7] 于秀文;李姗姗;孙玉荣;王显艳;张春庆. 胃癌发生不同阶段E-cadherin和TCF4的联合检测及其对胃癌Lauren's分型的意义[J]. 肿瘤防治研究, 2011, 38(9): 1031-1034.
- [8] 周英琼;肖胜军;侯巧燕;莫文法. TGF- $\beta$ 1及其信号转导通路分子在鼻咽癌组织芯片中的表达及意义[J]. 肿瘤防治研究, 2011, 38(9): 1023-1027.
- [9] 申兴斌;段惠佳;赵杨;张古林. 垂体肿瘤转化基因在大肠正常黏膜、腺瘤及大肠癌组织中的表达及意义[J]. 肿瘤防治研究, 2011, 38(9): 1042-1045.
- [10] 陈曦;毛勤生;黄华;朱建伟. PKC- $\zeta$ 在大肠良恶性组织中的表达及其与Cortactin蛋白的关系[J]. 肿瘤防治研究, 2011, 38(8): 903-908.
- [11] 王志峰;刘勤江;廖世奇;葛廷;杨荣. 甲状腺癌NIS和TSHR表达的矛盾性及非相关性[J]. 肿瘤防治研究, 2011, 38(8): 909-913.
- [12] 秦艳茹;艾教育;汤虹;李芳芳;乔俊静. 食管鳞状细胞癌组织中Ezrin基因的表达和临床意义[J]. 肿瘤防治研究, 2011, 38(8): 914-917.
- [13] 黄海建;余英豪;郑智勇. 卵巢恶性Brenner瘤伴脾转移1例报告并文献复习 [J]. 肿瘤防治研究, 2011, 38(8): 954-956.
- [14] 胡蓉环;刘安文;蔡婧;张树辉. MAP4K4在肝细胞癌中的表达及意义[J]. 肿瘤防治研究, 2011, 38(7): 752-755.
- [15] 杨廷桐;武俊芳;李秀杰;孙洁;候夏宝. p53基因突变对非小细胞肺癌TSG101/MDM2信号通路的影响[J]. 肿瘤防治研究, 2011, 38(7): 774-777.