

[1]王婷婷,庄园,陈娜,等.肿瘤相关中性粒细胞在胃癌中的分布、表型及其免疫抑制功能研究[J].第三军医大学学报,2014,36(06):587-591.

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肿瘤相关中性粒细胞在胃癌中的分布、表型及其免疫抑制功能研究

(PDF)

分享到:

《第三军医大学学报》[ISSN:1000-5404/CN:51-1095/R] 卷: 36 期数: 2014年第06期 页码: 587-591 栏目: 论著 出版日期: 2014-03-30

Title: Distribution, phenotype and immunosuppressive function of tumor-associated neutrophils in gastric cancer

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关键词: 胃癌; 中性粒细胞; CD3⁺ T细胞

Keywords: gastric cancer; neutrophils; ; CD3⁺ T cells

分类号: R331.123;R730.23;R735.2

文献标志码: A

摘要: 目的 分析胃癌患者外周血中及不同类型胃组织中的中性粒细胞的分布情况,并研究其表型,探讨胃癌组织培养上清诱导的条件性中性粒细胞对CD3⁺T细胞功能的影响。方法 采用流式细胞术检测并分析42例胃癌患者的胃癌组织、癌旁组织、正常胃组织及外周血中CD66b⁺中性粒细胞的比例及表型,同时采用免疫组织化学染色技术针对中性粒细胞表面标志CD15原位分析不同类型胃组织石蜡切片中中性粒细胞的浸润情况,最后用胃癌组织培养上清诱导的条件性中性粒细胞与CD3⁺T细胞共培养,检测其对T细胞增殖能力的影响。结果 胃癌患者外周血中性粒细胞比例明显高于健康成人(P<0.01),胃癌组织中的中性粒细胞的频率也高于癌旁组织(P<0.05)和正常胃组织(P<0.05);在胃癌患者外周血及不同类型胃组织浸润的中性粒细胞可能主要为成熟的分叶核粒细胞;相较于正常胃组织,胃癌组织培养上清诱导的条件性中性粒细胞能显著抑制CD3⁺T细胞增殖(P<0.01)。结论 中性粒细胞在胃癌微环境中浸润增高,其可能通过抑制CD3⁺T细胞增殖而促进胃癌进展。

Abstract: Objective To analyze the distribution and phenotype of neutrophils in periphery blood and different types of gastric tissues from gastric cancer (GC)

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patients, and to investigate the influence of GC tissue culture supernatants induced-conditioned neutrophils (GCSI-CNs) on CD3⁺ T cells. **Methods** Flow cytometry was employed to detect and analyze the ratio and phenotype of CD66b⁺ neutrophils in tumoral, peritumoral and normal gastric tissues and peripheral blood of 42 GC patients. Then, paraffin-embedded tissues of GC patients were investigated immunohistochemically with anti-human CD15 antibody to analyze the infiltration of neutrophils *in situ*. Finally, GCSI-CNs were cocultured with CD3⁺ T cells, and the proliferation of CD3⁺ T cells was analyzed by flow cytometry. **Results** The percentage of neutrophils in periphery blood of GC patients was much higher than that in healthy donors ($P<0.01$). The frequency of neutrophils was significantly higher in tumoral gastric tissues than in peritumoral ($P<0.05$) or in normal gastric tissues ($P<0.05$). Meanwhile, neutrophils infiltrated in different types of gastric tissues and in periphery blood of GC patients were probably mainly mature segmented neutrophils. In addition, GCSI-CNs significantly inhibited the proliferation of CD3⁺T cells. **Conclusion** Neutrophils are accumulated in GC microenvironment and may facilitate the progression of GC by inhibiting the proliferation of CD3⁺ T cells.

参考文献/REFERENCES:

王婷婷, 庄园, 陈娜, 等. 肿瘤相关中性粒细胞在胃癌中的分布、表型及其免疫抑制功能研究[J]. 第三军医大学学报, 2014, 36(6):587-591.

相似文献/REFERENCES:

[1]杨兆瑞, 吴晴, 陈嘉薇, 等. HIF-1 α 、JNK1、P-gp、MRP1和LRP蛋白在胃癌中的表达与临床病理及预后的关系[J]. 第三军医大学学报, 2007, 29(18):1755.

YANG Zhao-rui, WU Qing, CHEN Jia-wei, et al. Expressions, clinicopathological features and prognostic significance of HIF-1 α , JNK1, P-gp, MRP1 and LRP proteins in human gastric carcinoma[J]. J Third Mil Med Univ, 2007, 29(06):1755.

[2]李勇, 范立侨, 赵群, 等. 针对survivin的反义寡核苷酸对人胃癌细胞株BGC-823生长、侵袭、迁移能力的影响[J]. 第三军医大学学报, 2011, 33(13):1350.

Li Yong, Fan Liqiao, Zhao Qun, et al. Anti-survivin oligonucleotides suppresses growth, invasion and migration in human gastric cancer BGC-823 cells[J]. J Third Mil Med Univ, 2011, 33(06):1350.

[3]马华, 梅峰, 马千里, 等. Reg IV在胃癌中的表达及其临床意义[J]. 第三军医大学学报, 2006, 28(05):441.

[4]孙永强, 王强, 郑国静, 等. 罗非昔布对裸鼠人胃癌原位种植瘤组织中血管内皮生长因子和诱导型一氧化氮合酶表达的影响[J]. 第三军医大学学报, 2007, 29(10):929.

SUN Yong-qiang, WANG Qiang, ZHENG Guo-jing, et al. Effect of rofecoxib on expressions of VEGF and inducible NOS in human gastric carcinoma tissues established in nude mice by orthotopic transplantation[J]. J Third Mil Med Univ, 2007, 29(06):929.

[5]俞慧宏, 吴小翎, 张苜, 等. 测定胃癌患者肿瘤组织与外周血中前列腺素E₂的临床意义[J]. 第三军医大学学报, 2008, 30(05):444.

YU Hui-hong, WU Xiao-ling, ZHANG Mu, et al. Prostaglandin E₂ in peripheral blood and tumor mass of patients with gastric cancer[J]. J Third Mil Med Univ, 2008, 30(06):444.

[6]孙梯业, 赵永亮, 颜伟, 等. CXCR4在VEGF-C介导的胃癌淋巴道转移中的作用[J]. 第三军医大学学报, 2008, 30(02):161.

SUN Ti-ye, ZHAO Yong-liang, YAN Wei, et al. Role of CXCR4 in lymph node metastasis promoted by VEGF-C in gastric carcinoma[J]. J Third Mil Med Univ, 2008, 30(06):161.

[7]肖天英, 李琦. 以下肢静脉血栓、乳糜腹、双侧胸腔积液及肺栓塞为主要表现的胃癌1例[J]. 第三军医大学学报, 2007, 29(18):1741.

[8]郭红, 郝嘉, 吴超, 等. hTERT隐性表位肽 核酸病毒样颗粒疫苗抗胃癌免疫的初步研究[J]. 第三军医大学学报, 2006, 28(02):169.

[9]余佩武. 腹腔镜胃癌根治术的应用现状与展望[J]. 第三军医大学学报, 2008, 30(19):1775.

[10]张坤, 余佩武, 高朋芬, 等. 胃癌细胞-树突状细胞融合疫苗肿瘤细胞杀伤活性研究[J]. 第三军医大学学报, 2006, 28(05):404.
