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胃肠道和眼附属器MALToma C-myc的表达

苏 颖, 王 峰

苏颖, 王峰, 哈尔滨医科大学第一临床医学院眼科医院 黑龙江省哈尔滨市 150001
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通讯作者: 王峰, 150001, 黑龙江省哈尔滨市, 哈尔滨医科大学第一临床医学院眼科医院. wfsym396@126.com
电话: 0451-82726956
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Expression of C-myc in ocular adnexa and gastrointestinal mucosa-associated lymphatic tissue lymphomas

Ying Su, Feng Wang

Ying Su, Feng Wang, Department of Ophthalmology, the First Affiliated Clinical College of Harbin Medical University, Harbin 150001, Heilongjiang Province, China
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Correspondence to: Dr. Feng Wang, Department of Ophthalmology, the First Affiliated Clinical College of Harbin Medical University, Harbin 150001, Heilongjiang Province, China. wfsym396@126.com
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Abstract

AIM: To investigate the expression of C-myc protein in ocular adenxa and gastrointestinal mucosa-associated lymphatic tissue lymphomas (MALToma) and its significance.

METHODS: Immunofluorescence assay was used to detect the expression of C-myc protein in lymphoma of the ocular adnexa (n = 32) and gastrointestinal MALToma (n = 29) as well as their corresponding normal tissues.

RESULTS: The positive rate of C-myc expression was 68.8% and 86.2% in lymphoma of the ocular adnexa and gastrointestinal MALToma, respectively, and C-myc expression had no significant correlations with the age and sex of patients (P > 0.05). In gastrointestinal MALToma, 9 cases were highly-differentiated focus, which was significantly different from that in lymphoma of the ocular adnexa (only 1 case). C-myc was not expressed in normal ocular adenxa and gastrointestinal lymphatic tissues.

CONCLUSION: The expression of C-myc protein is higher in lymphoma of the ocular adnexa, and the patients with ocular adenxa lymphoma and gastrointestinal MALToma have a good prognosis.

Key Words: Ocular adnexa; Gastrointestine; Lymphoma

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摘要

目的: 探讨C-myc基因蛋白在眼附属器和胃肠道MALT型淋巴瘤的表达和作用.

方法: 应用免疫荧光法检测C-myc在眼附属器淋巴瘤(n = 32)、胃肠道淋巴瘤(n = 29)以及正常眼附属器组织(n = 32)和正常胃肠道淋巴组织(n = 29)中的表达.

结果: C-myc在眼附属器淋巴瘤和胃肠道淋巴瘤中的表达率分别为68.8%和86.2%, 与年龄和性别无关(P>0.05). 胃肠道MALT型淋巴瘤中, 有9例表现为高分期转化病灶, 与眼附属器淋巴瘤(1例)有显著差异(P<0.05). C-myc在正常眼附属器组织和正常胃肠道淋巴组织中无表达.

结论: 眼部附属器MALT型淋巴瘤中C-myc表达率比在胃肠道MALT型淋巴瘤中低, 眼部附属器MALT型淋巴瘤和胃肠道MALT型淋巴瘤预后好.

关键词: 眼附属器; 胃肠道; 淋巴瘤

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■同行评价
本文研究C-myc基因蛋白在眼附属器和胃肠道MALT型淋巴瘤的表达和作用, 立意有一定新颖性, 研究符合伦理学要求.

0 引言

在黏膜上皮下的固有层内存在着淋巴细胞集合部位, 形成一定程度上独立于全身免疫机构之外的固有免疫组织,即黏膜相关淋巴组织(mucosa associated lymph tissue, MALT)[1], 担负着防御抗原入侵的任务, 为机体提供较为完善的保护[2-4]. 在眼部附属器如泪腺、泪囊和泪道黏膜下同样存在MALT. 我们观察C-myc基因蛋白在眼部附属器和胃肠道黏膜相关淋巴组织淋巴瘤(MALToma)的表达.

1 材料和方法

1.1 材料 确诊眼部附属器MALToma. 男23例, 女9例. 年龄15-65(平均52)岁. 病灶局限于泪腺25例, CT提示为泪腺肿物(图1), 在眼睑中7例, 通过Ann Arbor临床分期, 31例中Ⅰ期, 局限于眼部附属器1例, Ⅱ期1例. 29例胃肠道MALToma, 男21例, 女8例. 年龄19-63(平均45)岁. 病灶局限于胃部15例, 在肠部14例. 根据Musshoff临床分期标准, 21例为Ⅰ级, 6例为Ⅱ级, 2例为Ⅳ级. 诊断采用WHO标准. 32例确诊眼部附属器MALToma和29例胃肠道MALToma作为实验组. 32例正常眼附属器组织和29例正常胃肠道相关淋巴组织作为对照组. 石蜡包埋组织切片4 μm厚, 经40 g/L甲醛固定, C-myc(1∶100)抗体和Texas red抗人IgG为美国Serotec公司提供.

1.2 方法 免疫组织化学间接荧光法, 于荧光显微镜下观察. C-myc阳性指标为红色荧光, 用图像分析系统分析.

统计学处理 数据分析应用χ^2检验和SPSS 10.0软件.

2 结果

32例眼部附属器MALT型淋巴瘤中, C-myc阳性率为68.8%. C-myc的表达与年龄、性别、部位或临床分期没有显著关系.

在29例胃肠道MALT型淋巴瘤中, C-myc阳性率为86.2%(图2). 通过统计学分析, C-myc表达与年龄、性别和病灶部位没有显著关系. 在32例眼部MALT型淋巴瘤中, 1例为高分期转化病灶. 而在29例胃肠道MALT型淋巴瘤中, 9例表现为高分期转化病灶. 二者之间有显著差异(P<0.05).

在32例正常眼附属器组织和29例正常胃肠道相关淋巴组织中未见C-myc表达.

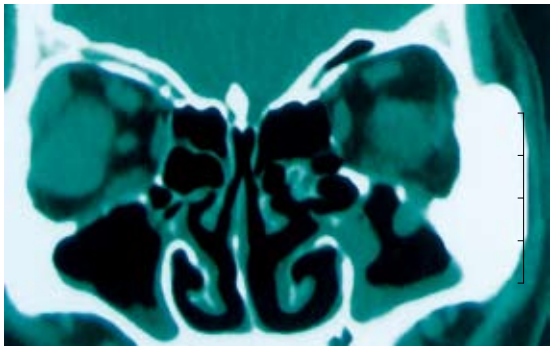

图 1 眼部CT示泪腺肿物.

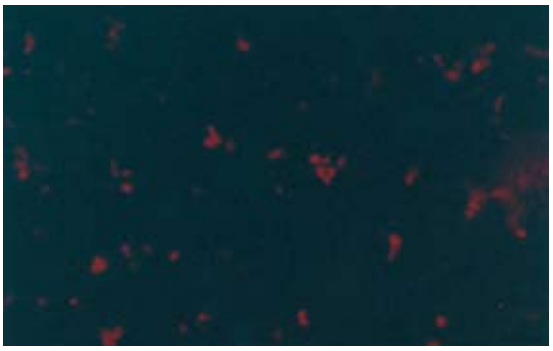

图 2 胃肠道MALToma C-myc阳性 (× 400).

3 讨论

黏膜相关淋巴组织淋巴瘤(MALToma)是眼部附属器淋巴瘤中最常见的淋巴瘤(80%)[5].在临床中, MALToma进展缓慢并且组织病理学等级为Ⅰ[6,7]. 其低度恶性, 很少转移和高度良性转化, 并且通常有较好预后[8]. C-myc基因是髓细胞白血病病毒癌基因的同系物, 由3个外显子和2个内含子组成, 定位于人类染色体8q24, 编码一种p62核蛋白. 在细胞静止期, C-myc几乎不表达, 但在有丝分裂原刺激下迅速表达促使细胞由G_0期进入G_1期, 增加细胞众数. 因此, C-myc原癌基因与细胞周期调控有关. C-myc原癌基因激活的主要机制有扩增、重排和异常高表达. 前二者为C-myc基因结构异常, 后者则与C-myc基因的调控有关, C-myc基因低甲基化可能为其激活的另一重要机制.

1985年Shibuya首次在部分胃癌细胞中发现C-myc基因扩增和高表达. C-myc表达与肿瘤生长速度和分化程度有关, 在增殖速度较快和分化较低的肿瘤中表达增高更为显著. 我科对35例胃癌进行检测仅1例有扩增, 说明C-myc基因扩增在胃癌中并非常见. 虽然胃癌C-myc扩增率较低(国外报告低于10%), 但C-myc的表达却相对较高. Tatsuta *et al*采用原位杂交技术检测31例

胃黏膜隆起性病变mRNA的表达, 正常胃黏膜均为阴性, 18例腺瘤中有4例(22%)呈弱阳性, 而26例胃癌中有16例(62%)C-myc mRNA呈阳性. 随访结果表明, C-myc mRNA阳性病例在随访过程中有近半数发生癌变, 而mRNA阴性病例未发现有癌变病例. Ninomiye *et al*采用免疫组化法分析213例胃癌C-myc p62蛋白的高表达与肿瘤的浸润、深度和预后不良有关.

MALToma是一种低分期淋巴瘤[8], 细胞增殖通常低于30%. 当其增殖高于30%时, 容易转移至其他部位. 在32例眼部附属器MALToma中, C-myc阳性率为68.8%. 实验表明眼附属器MALToma预后与临床分期相关, 因为只有2例分别在Ⅰ期和Ⅱ期. 眼部附属器MALToma在不同时期有不同治疗. 在Ⅰ期的病例可通过手术和局部放疗治疗. Ⅱ-Ⅳ病例必须化疗和应用大量放疗. Thieblemont *et al*[9]研究表明在眼部附属器MALToma和胃肠道MALToma的预后没有显著差异. 我们的研究表明眼部附属器MALToma中C-myc表达率比在胃肠道MALToma中低, 眼部附属器MALToma和胃肠道MALToma预后好. 有许多研究关于胃肠道MALToma, 可以作为眼部附属器MALToma诊断治疗和预后的参考.

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·消息·

全国胃黏膜癌前病变与癌前疾病诊治研讨会

本刊讯 全国胃黏膜癌前病变与癌前疾病诊治研讨会将于2006年秋季在重庆举行, 现将征文通知公布如下:

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2 联系方式

重庆市第三军医大学西南医院消化科赵晶京收(邮编: 400038); E-mail: zhaojingjing-1@sina.com.