[1]罗效梅,熊玉霞,曹均,等.全血γ干扰素诱导蛋白-10释放试验对活动性肺结核的诊断价值[J].第三军医大学学报,2013,35(19):2092-2094.
Luo Xiaomei,Xiong Yuxia,Cao Jun,et al.Diagnostic value of whole blood gamma interferon-inducible protein 10 release assay in active pulmonary tuberculosis[J].J Third Mil Med Univ,2013,35(19):2092-2094.

全血γ干扰素诱导蛋白-10释放试验对活动性肺结核

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Title: Diagnostic value of whole blood gamma interferon-inducible protein 10 release assay in active pulmonary tuberculosis

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关键词: γ干扰素诱导蛋白-10; 肺结核; 诊断

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摘要: 目的 探讨全血γ干扰素诱导蛋白-10（IP-10）对活动性结核病的辅助诊断价值。方法 检测66例活动性肺结核病患者、40例非结核呼吸疾病患者及40例健康对照者血浆中非特异性IP-10的水平；分别应用纯化的结核分枝杆菌特异性蛋白早期分泌性靶抗原-6（EAST-6）和培养液蛋白10(CFP10)体外刺激患者全血，检测活动性结核病组、非结核呼吸疾病组和健康对照组人群全血中IP-10的释放水平；绘制受试者工作特征曲线，比较非特异性IP-10和特异性IP-10对活动性肺结核的诊断效能。 结果 活动性结核病组患者血浆中非特异性IP-10的水平为(139.6±124.2) pg/mL，明显高于健康对照组[(33.5±17.7)pg/mL, $P<0.05$]；而与非结核呼吸疾病组[(88.1±73.3)pg/mL]无明显差别($P>0.05$)。经ESAT-6及CFP10诱导后，活动性结核病组患者全血IP-10释放水平为（146.0±167.1）pg/mL，显著高于非结核呼吸疾病组[(26.6±9.7)pg/mL, $P<0.01$]与健康对照组[(24.2±9.7)pg/mL,$P<0.01$]。经过ROC分析，结核特异性的IP-10诊断结核病的临界值为41.2 pg/mL，敏感度为68.2%，特异度为93.7%。特异性IP-10 ROC曲线下面积为0.905，高于非特异性IP-10(0.747, $P<0.01$)。 结论 IP-10可作为活动性结核病的辅助诊断方法。采用结核特异性IP-10 较血浆非特异性IP-10能够提高活动性肺结核的诊断效能。

Abstract: Objective To determine the clinical value of interferon-inducible protein 10 (IP-10) in auxiliary diagnosis of active tuberculosis. Methods The level of

non-specific IP-10 was evaluated in the plasma of 66 active tuberculosis patients, 40 non-pulmonary tuberculous patients and 40 healthy controls, and the level of specific IP-10 was detected in the whole blood after stimulated by purified mycobacterium tuberculosis-specific antigen ESAT6 and culture filtrate protein 10 (CFP10). Then the receiver operating characteristic (ROC) curve was drawn to determine the diagnostic value of non-specific IP-10 and specific IP-10 to detect active tuberculosis. Results The non-specific IP-10 level of the active tuberculosis group (139.6±124.2 pg/mL) was obviously higher than that of the healthy control group (33.5±17.7 pg/mL, *P*<0.05), but had no difference with that of the non-tuberculous pulmonary disease group (88.1±73.3 pg/mL, P>0.05). After stimulated by the ESAT6 and CFP10, the specific IP-10 level of active tuberculosis group (146.0±167.1 pg/mL) was significantly higher than that of non-tuberculous pulmonary disease group (26.6±9.7 pg/mL, *P*<0.01) and that of the healthy control group (24.2±9.7 pg/mL, *P*<0.01). After ROC analysis, the threshold of the specific IP-10 for diagnosis of tuberculosis was 41.1 pg/mL and its sensitivity and specificity were 70.8% and 91.8% respectively. The area under curve (AUC) of the specific IP-10 was 0.905, which was obviously higher than that of non-specific IP-10 (0.747, *P*<0.01). Conclusion The gamma interferon-inducible protein 10 release assay can be used as auxiliary diagnostic method for active tuberculosis. The diagnostic value of the specific IP-10 is better than that of non-specific IP-10.

参考文献/REFERENCES:

罗效梅,熊玉霞,曹均,等. 全血γ干扰素诱导蛋白-10释放试验对活动性肺结核的诊断价值[J].第三军医大学学报,2013,35(19):2092-2094.

相似文献/REFERENCES:

[1]鄢仁晴,罗军敏,孙万邦,等.肺结核患者外周血树突状细胞亚群的变化[J].第三军医大学学报,2007,29(13):1298.
YAN Ren-qing,LUO Jun-min,SUN Wan-bang,et al.Changes of peripheral blood dendritic cell subgroup in pulmonary tuberculosis patients[J].J Third Mil Med Univ,2007,29(19):1298.
[2]胡良安,李岱容,罗永艾,等.肺结核患者外周血中CD4+CD25+FoxP3+调节T细胞增多并抑制抗结核免疫[J].第三军医大学学报,2011,33(20):2124.
Hu Liangan,Li Dairong,Luo Yongai,et al.Peripheral blood CD4+CD25+FoxP3+ regulatory T cells in active pulmonary tuberculosis patients[J].J Third Mil Med Univ,2011,33(19):2124.
[3]付留杰,熊鸿燕,刘元东,等.某部队肺结核患病现况及发病影响因素的流行病学研究[J].第三军医大学学报,2005,27(13):1400.
[4]刘琦,刘新宇,张仁卿,等.汉、藏族肺结核患者血清差异蛋白质的质谱分析[J].第三军医大学学报,2010,32(18):1986.
Liu Qi,Liu Xinyu,Zhang Renqing,et al.Mass spectrometry for serum differential proteins from Han and Tibetan patients with pulmonary tuberculosis[J].J Third Mil Med Univ,2010,32(19):1986.
[5]李素芝,蒋亚建,谢本维,等.中国藏族人群HLA-DRB1、-DQA1、-DQB1等位基因多态性与肺结核易感性的关联性研究[J].第三军医大学学报,2011,33(12):1254.
Li Suzhi,Jiang Yajian,Xie Benwei,et al.Correlation between polymorphisms of DRB1, -DQA1, and -DQB1 alleles and susceptibility to pulmonary tuberculosis in Tibetan population of China[J].J Third Mil Med Univ,2011,33(19):1254.
[6]高晓凤,贾显奉,许平,等.西部2个贫困县肺结核患者发现延误情况及其影响因素分析[J].第三军医大学学报,2012,34(14):1471.
[7]杨先涛,张祯祯,詹学,等.肺结核患儿外周血单个核细胞中microRNA表达的初步研究[J].第三军医大学学报,2013,35(19):2051.
Yang Xiantao,Zhang Zhenzhen,Zhan Xue,et al.microRNA expression in peripheral blood mononuclear cells from pulmonary tuberculosis children[J].J Third Mil Med Univ,2013,35(19):2051.
[8]孙芬芬,曹晖,曹国强.结节性脂膜炎误诊肺结核1例[J].第三军医大学学报,2013,35(21):2300.