血清SCC-Ag、CYFRA21-1及VEGF水平与宫颈癌临床病理特征及预后的关系

Title: The relationship between serum SCC-Ag,CYFRA21-1 and VEGF and the clinicopathological features and prognosis of cervical cancer

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摘要: 目的:探讨血清鳞状细胞癌抗原（SCC-Ag）、细胞角蛋白19片段抗原(CYFRA21-1)及血管内皮生长因子（VEGF）水平与宫颈癌临床病理特征及预后的关系。方法:选取2010年1月至2012年12月海南西部中心医院收治的146例宫颈癌患者、50例宫颈上皮内瘤病变（CIN）患者(CIN组)和50例正常健康女性(对照组)，比较各组血清SCC-Ag、CYFRA21-1及VEGF水平。分析宫颈癌患者血清SCC-Ag、CYFRA21-1及VEGF水平与临床病理特征的关系，采用Kaplan-Meier法分析不同临床病理特征患者生存率差异，多因素COX比例风险回归模型分析宫颈癌患者预后的影响因素。结果:宫颈癌组血清SCC-Ag、CYFRA21-1及VEGF水平均明显高于CIN组和对照组 [SCCA（ng/ml）：9.04±2.35 vs 1.91±0.62和0.65±0.14；CYFRA21-1（ng/ml）：5.48±1.62 vs 0.92±0.43和0.64±0.25；VEGF（pg/ml）：326.42±48.15 vs 125.48±23.60和108.62±18.73，均P＜0.01]。血清SCC-Ag、CYFRA21-1及VEGF水平与宫颈癌患者的临床分期、病理分级、淋巴结转移、浸润深度及脉管浸润相关（P＜0.05）。单因素及多因素COX回归分析显示，临床分期 [HR（95%CI）：2.016（1.512～2.915）]、淋巴结转移 [HR（95%CI）：4.013（2.937～6.016）]、SCC-Ag [HR（95%CI）：2.972（2.106～4.618）]、CYFRA21-1 [HR（95%CI）：1.704（1.335～2.519）]及VEGF [HR（95%CI）：2.116（1.685～3.164）]阳性表达是宫颈癌患者预后不良的危险因素。结论:宫颈癌患者血清SCC-Ag、CYFRA21-1及VEGF水平明显升高，SCC-Ag、CYFRA21-1及VEGF阳性表达是影响宫颈癌患者预后不良的危险因素。

Abstract: Objective:To investigate the relationship between serum squamous cell carcinoma antigen (SCC-Ag),cytokeratin 19 fragment antigen (CYFRA21-1) and vascular endothelial growth factor (VEGF) and clinicopathological characteristics and prognosis of cervical cancer.Methods:One hundred and forty-six cases of cervical cancer,50 cases of cervical intraepithelial neoplasia (CIN) and 50 normal healthy women (control group) were selected from January 2010 to December 2012 in Central Hospital of Western Hainan.The serum levels of SCC-Ag,CYFRA21-1 and VEGF were compared in each group.The relationship between serum SCC-Ag,CYFRA21-1 and VEGF levels and clinicopathological features in patients with cervical cancer was analysed.The survival rate of patients with different clinicopathological characteristics was analyzed by Kaplan-Meier method.Multivariate COX proportional hazards regression model was used to analyze the prognostic factors of cervical cancer.Results:The serum levels of SCC-Ag,CYFRA21-1 and VEGF in the cervical cancer group were significantly higher than those in the group CIN and the control group [SCCA（ng/ml）：9.04±2.35 vs 1.91±0.62 and 0.65±0.14.CYFRA21-1（ng/ml）：5.48±1.62 vs 0.92±0.43 and 0.64±0.25.VEGF（pg/ml）：326.42±48.15 vs 125.48±23.60 and 108.62±18.73，all P＜0.01].Serum levels of SCC-Ag,CYFRA21-1 and VEGF were associated with clinical staging,pathological grading,lymph node metastasis,depth of infiltration and vascular infiltration

in patients with cervical cancer （P < 0.05） .Univariate and multivariate COX regression analysis showed that clinical stage [HR(95%CI):2.016(1.512~2.915) and lymph node metastasis [HR(95%CI):4.013(2.937~6.016),SCC-Ag [HR(95%CI):2.972(2.106~4.618),CYFRA21-1 [HR(95%CI):1.704(1.335~2.519)] and VEGF [HR(95%CI):2.116(1.685~3.164)] positive expression were the risk factors of poor prognosis of patients with cervical cancer.Conclusion:The levels of serum SCC-Ag,CYFRA21-1 and VEGF in cervical cancer patients increased significantly,and the positive expressions of SCC-Ag,CYFRA21-1 and VEGF were risk factors affecting the prognosis of patients with cervical cancer.

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