

# 肿瘤标志物Cyfra211水平检测在初治原发食管鳞癌诊治中的价值

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**Title:** The value of tumor marker Cyfra211 level in the diagnosis and treatment of primary squamous cell carcinoma of esophagus

**作者:** 姜艳红; 许青霞; 陈光意  
郑州大学附属肿瘤医院检验科, 河南 郑州 450008

**Author(s):** Jiang Yanhong; Xu Qingxia; Chen Guangyi  
Clinical Laboratory, The Tumor Hospital of Zhengzhou University, Henan Zhengzhou 450008, China.

**关键词:** 肿瘤标志物; 细胞角蛋白19片段抗原; Cyfra211; 食管鳞癌

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**摘要:** 目的: 分析肿瘤标志物细胞角蛋白19片段抗原(Cyfra211)水平检测在初治原发食管鳞癌诊治中的价值。方法: 回顾性分析2014年1月至2016年12月河南省肿瘤医院胸外科和消化内科99例初治原发食管鳞癌 (ESCC)住院病人的临床资料, 并设立食管非鳞癌 (NESCC) 组、食管炎组和正常对照组, Mann-Whitney U检测分析各组Cyfra211水平差异; 通过ROC曲线分析血清Cyfra211诊断ESCC的效能; 通过Spearman相关性分析, 分析治疗前后血清Cyfra211水平与ESCC的TNM分期、细胞分化程度及3年随访结果的相关性。结果: ESCC组血清Cyfra211水平显著高于NESCC组、食管炎组和正常对照组, 差异有统计学意义 ( $P < 0.05$ ) ; 当血清Cyfra211值为4.04 ng/ml时有较理想的灵敏度和特异度, 分别为80.80%和78.40%; 治疗前患者血清Cyfra211水平高低与ESCC患者TNM分期和细胞分化程度呈等级正相关关系 ( $P < 0.05$ ) , 而治疗前后血清Cyfra211变化率仅与细胞分化程度呈等级正相关关系 ( $P < 0.05$ ) 。结论: 血清Cyfra211水平可用于鉴别诊断ESCC; 治疗前血清Cyfra211水平与ESCC患者TNM分期和细胞分化程度存在等级正相关关系, 治疗前后血清Cyfra211变化率与癌细胞分化程度存在等级正相关关系。

**Abstract:** Objective: To investigate the value of tumor marker Cyfra211 level in the diagnosis and treatment of primary esophageal squamous cell carcinoma(ESCC).Methods: Clinical data of 99 cases of untreated primary ESCC patients of Henan Cancer Hospital from January 2014 to December 2016 were retrospectively reviewed, non esophageal squamous cell carcinoma(NESCC) control group, esophagitis group and normal control group were set up.Mann-Whitney U test was used to analyze the difference of Cyfra211 levels in each group.The efficacy of serum Cyfra211 level in diagnosis of ESCC was analyzed by ROC curve.The correlations between Cyfra211 level before and after treatment and TNM staging, the degree of cell differentiation and 3 years of follow-up of ESCC were analyzed by Spearman correlation analysis.Results: The Cyfra211 level of ESCC group is significantly higher than that of NESCC group and normal control group, the difference is statistically significant ( $P < 0.05$ ).When the Cyfra211 level is 4.04 ng/ml, the sensitivity(80.80%) and specificity(78.40%) are idea.The level of Cyfra211 before treatment is positively correlated with the stage of TNM and the degree of cell differentiation in patients with ESCC( $P < 0.05$ ).The rate of Cyfra211 change is only positively correlated with the degree of cell differentiation( $P < 0.05$ ).Conclusion: The serum Cyfra211 level can be used for differential diagnosis of ESCC.There is a positive correlation between the level of Cyfra211 and the stage of TNM and the degree of cell differentiation in patients with ESCC before treatment, and the rate of Cyfra211 change has positive correlation with the degree of differentiation of cancer cells.

## 参考文献/REFERENCES

- [1]Hur C, Miller M, Kong CY, et al. Trends in esophageal adenocarcinoma incidence and mortality [J] . Cancer, 2013, 119(6): 1149-1458.
- [2]Rades D, Dziggel L, Bartscht T, et al. Predicting overall survival in patients with brain metastases from

- esophageal cancer [J] . *Anticancer Res*, 2014, 34(11): 6763-6765.
- [3]Li RF, Zhang JQ, Wang XM, et al.Application of alphaenolase combined with CYFRA21-1 and CA125 in diagnosis of malignant pleural effusion [J] . *The Journal of Practical Medicine*, 2017, 33(18): 3114-3118.
- [4]Sun DW, Zhang YY, Sun XD, et al.Prognostic value of cytokeratin 19 in hepatocellular carcinoma: A Meta-analysis [J] .*Clin Chim Acta*, 2015, 448: 161-169.
- [5]Yoshida K, Sato K, Tonogi M, et al.Expression of cytokeratin 14 and 19 in process of oral carcinogenesis [J] .*Bull Tokyo Dent Coll*, 2015, 56(2): 105-111.
- [6]Liu Z, Yu P, Xiong Y, et al.Significance of CK19, TPO, and HBME-1 expression for diagnosis of papillary thyroid carcinoma [J] .*Int J Clin Exp Med*, 2015, 8(3): 4369-4374.
- [7]Rustgi AK, Elserag HB.Esophageal carcinoma [J] .*N Engl J Med*, 2014, 371(26): 2499-2509.
- [8]Li GH, Zheng Y, Shi GJ, et al.Screening and analysis of long non-coding RNA differential expression in Xinjiang Han patients with esoph-ageal squamous cell carcinoma [J] .*The Journal of Practical Medicine*, 2017, 33(11): 1805-1810.
- [9]Ma XY.The relationship between p53 and cyclindl expression in esophageal carcinoma and the clinical features and prognosis [D] .Hebei Medical University, 2013.
- [10]Wang JM, Xu B, Rao JY, et al.Diet habits, alcohol drinking, tobacco smoking, green tea drinking, and the risk of esophageal squamous cell carcinoma in the Chinese population [J] .*Eur J Gastroenterol Hepatol*, 2007, 19(2): 171-176.
- [11]Szajda SD, Snarska J, Jankowska A, et al.Cathepsin D and carcino-embryonic antigen in serum, urine and tissues of colon adenocarcinoma patients [J] .*Hepatogastroenterol*, 2008,55(82-83): 388-393.
- [12]Zhang HQ, Wang RB, Yan HJ, et al.Prognostic significance of CYFRA21-1, CEA and hemoglobin in patients with esophageal squamous cancer undergoing concurrent chemoradiotherapy [J] .*Asian Pac J Cancer Prev*, 2012, 13(1): 199-203.
- [13]Wang T, Zhang W, Liu Y, et al.Clinical significance of the novel tumor marker CYFRA21-1 in patients with esophageal cancer [J] .*National Medical Journal of China*, 2001, 81(22): 1390-1391. [王涛, 张伟, 刘毅, 等.血清细胞角蛋白19片段检测对食管癌的临床意义 [J] .*中华医学杂志*, 2001, 81(22): 1390-1391. ]
- [14]Zhou G, Li H, Decamp D, et al. 2D differential in-gel electrophoresis for the identification of esophageal scans cell cancer-specific protein markers [J] .*Mol Cell Proteomics*, 2002, 1(2): 117-124.
- [15]Shimada H, Nabeya Y, Okazumi S, et al. Prognostic significance of CYFRA 21-1 in patients with esophageal squamous cell carcinoma [J] .*J Am Coll Surg*, 2003, 196(4): 573-578.
- [16]Shimada H, Nabeya Y, Okazumi S, et al. Prediction of survival with squamous cell carcinoma antigen in patients with resectable esophageal squamous cell carcinoma [J] . *Surgery*, 2003, 133(5): 486-494.

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