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贲门腺癌组织中Smad基因家族不同成员的表达及其临床意义 [点此下载全文](#)

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摘要:

目的: 检测贲门腺癌 (gastric cardia adenocarcinoma, GCA) 中Smad基因家族不同成员的表达水平及其相关性, 并探讨其临床意义。方法: 收集河北医科大学第四医院2004至2009年间病理确诊的贲门腺癌患者110例, RT-PCR检测贲门腺癌和癌旁组织中Smad2、Smad3、Smad4和Smad7 mRNA的表达, 免疫组织化学方法检测贲门腺癌组织和癌旁组织中p-Smad2/3、Smad4和Smad7蛋白的表达并分析其相关性, 分析p-Smad2/3、Smad4和Smad7蛋白表达与贲门腺癌临床病理特征的关系。结果: 贲门腺癌组织中Smad2、Smad3和Smad4 mRNA表达水平均显著低于相应癌旁组织 [ (0.4956±0.1862) vs (0.8611±0.2914), P<0.01; (0.4713±0.1712) vs (0.8314±0.2811), P<0.01; (0.5145±0.1987) vs (0.8954±0.2856), P<0.01], 而Smad7 mRNA表达水平显著高于癌旁组织 [ (0.5114±0.1962) vs (0.2012±0.1006), P<0.01]。贲门腺癌组织p-Smad2/3、Smad4蛋白表达的阳性率显著低于癌旁组织 (42.7% vs 93.6%, P<0.01; 45.5% vs 95.5%, P<0.01), 且与肿瘤TNM分期和组织分化程度密切相关 (P<0.05)。贲门腺癌组织Smad7蛋白表达阳性率显著高于癌旁组织 (48.2% vs 3.6%, P<0.01), 且与肿瘤组织分化程度密切相关 (P<0.05)。贲门腺癌中p-Smad2/3与Smad4蛋白的表达呈正相关, 但它们均与Smad7蛋白表达无明显的相关性。结论: 贲门腺癌组织低表达Smad2、Smad3和Smad4, 高表达Smad7, Smad基因的异常表达可能参与贲门腺癌的发生、发展。

关键词: [贲门腺癌](#) [Smad2](#) [Smad3](#) [Smad4](#) [Smad7](#)

Expressions of different Smads gene family members in gastric cardia adenocarcinoma tissues and their clinical significance [Download Fulltext](#)

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Abstract:

Objective: To investigate the expressions of different Smad genes in gastric cardia adenocarcinoma (GCA) and to explore their correlation and clinical significance. Methods: 110 cases of pathologically confirmed GCA were included from the Fourth Hospital of Hebei Medical University during 2004-2009 year. RT-PCR and immunohistochemistry methods was used to respectively detect the mRNA and protein expressions of Smad2, Smad3, Smad4 and Smad7 in GCA. Their correlations with clinical pathological characteristics of GCA were analyzed. Results: The expressions of Smad2, Smad3 and Smad4 mRNA in GCA tissues were significantly reduced with comparison to the paired normal tissues ( [0.4956±0.1862] vs [0.8611±0.2914], P<0.01; [0.4713±0.1712] vs [0.8314±0.2811], P<0.01; [0.5145±0.1987] vs [0.8954±0.2856], P<0.01), and Smad7 mRNA expression in GCA tissues was significantly increased with comparison to the paired normal tissues ( [0.5114±0.1962] vs [0.2012±0.1006], P<0.01). The positive protein expression rate of p-Smad2/3 and Smad4 in GCA tissues was significantly lower than that in the paired normal tissues (42.7% vs 93.6%, P<0.01; 45.5% vs 95.5%, P<0.01). The protein expressions of p-Smad2/3 and Smad4 were associated with TNM stage and pathological differentiation (P<0.05). The positive protein expression rate of Smad7 in GCA tissues (48.2%) was significantly higher than that in the paired normal tissues (3.6%) and was associated with pathological differentiation (P<0.05). The protein expression of p-Smad2/3 and Smad4 was positively correlated, while p-Smad2/3 and Smad4 did not show any correlation with Smad7. Conclusion: Decreased expression of Smad2, Smad3 and Smad4 and increased expression of Smad7 in GCA may be associated with the occurrence and development of GCA.

Keywords: [gastric cardia adenocarcinoma](#) [Smad2](#) [Smad3](#) [Smad4](#) [Smad7](#)

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