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论著

S100A9和NMP238在同时放化疗敏感性不同宫颈癌中的表达及意义

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摘要：

目的：初步探讨钙结合蛋白A 9（S100A9）和核质蛋白238（NMP238）的表达在宫颈癌同时放化疗敏感性中的意义。方法：收集治疗前的中晚期宫颈癌组织标本，置-80 ℃超低温冰箱中保存，病理诊断均为中分化鳞癌。在进行同时放化疗后，根据世界卫生组织实体瘤疗效判断标准，将收集的宫颈癌组织标本分为高敏感组和低敏感组。提取组织总蛋白，进行双向凝胶电泳和基质辅助激光解吸电离飞行时间质谱（MALDI-TOF-MS）分析鉴定差异表达蛋白。然后分别应用 Western印迹和免疫组织化学方法检测组织中的蛋白表达。 结果：筛选得到在同时放化疗敏感性不同宫颈癌组织中差异表达蛋白S100A9和NMP238， S100A9蛋白在高敏感组中高表达，NMP238在低敏感组中高表达。Western印迹检测结果与蛋白质组学结果一致。免疫组织化学结果显示S100A9在高敏感组中的表达强度和表达率（88.3%)均显著高于低敏感组（28.6%)，NMP238在低敏感组中的表达强度及表达率（35.0%)显著高于高敏感组（85.7%)。 结论：S100A9和NMP238的表达与宫颈癌同时放化疗敏感性有关，可能作为同时放化疗敏感性预测的标志物。

关键词： 宫颈癌 同时放化疗 蛋白质组学 免疫组织化学

Significance and expression of S100A9 and NMP238 in cervical carcinoma tissues with different concurrent chemoradiotherapy sensitivities

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Abstract:

ObjectiveTo determine the significance and expression of S100A9 and NMP238 in cervical carcinoma with different concurrent chemoradiotherapy sensitivities. MethodsFresh carcinoma tissues were collected from untreated cervical carcinoma patients and preserved at -80 ℃. The tissues were classified into 2 groups:a high sensitivity group （HS） and a low sensitivity group（LS） according to their response to concurrent chemoradiotherapy. Protein was separated by 2-dimensional gel electrophoresis (2-DE). Peptide mass fingerprintings (PMF) were acquired by matrix assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF-MS) and the proteins were identified by data searching in the Mascot-database. Differential expressed proteins were assayed by Western blot and immunohistochemistry.ResultsMost of the gels were clear and were successfully and reproductively analyzed. Intensity and rate of S100A9 expression were higher in the HS group than in the LS group,and those of NMP238 expression were higher in the LS group than in the HS group. ConclusionS100A9 and NMP238 expression is associated with concurrent chemoradiotherapy sensitivity in cervical carcinoma.

Keywords: cervical carcinoma；concurrent chemoradiotherapy；proteomics；immunohistochemistry

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