

IL-10在H.pylori相关性胃炎组织中的表达及与COX-2、iNOS的相关性

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Title: Expression of IL-10 in H.pylori-associated gastritis and its correlation with COX-2 and iNOS

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关键词: 幽门螺杆菌; 胃炎; 白细胞介素10; 环氧合酶-2; 诱导型一氧化氮合酶

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摘要: 目的:观察IL-10在H.pylori相关性胃炎组织中的表达及与COX-2、iNOS的相关性。方法:选取74例H.pylori相关性胃炎患者,均行H.pylori检测确定H.pylori感染情况,行病理组织学检测明确病理分型、胃黏膜炎症程度,行免疫组化检测胃黏膜中IL-10、COX-2、iNOS表达。分析H.pylori感染情况、病理诊断与组织分型结果,明确慢性胃炎患者H.pylori感染与病理炎症程度、病理分型的关系、IL-10表达与H.pylori感染的关系、比较H.pylori阳性胃炎不同病理类型中COX-2、iNOS表达情况,分析H.pylori阳性胃炎患者IL-10与COX-2、iNOS表达的相关性。结果:74例慢性胃炎患者中,H.pylori阳性59例,阴性15例,H.pylori检出率79.73%。H.pylori阳性与阴性患者在炎症程度的分布方面有显著差异($P < 0.05$),表现为H.pylori阳性患者中重度炎症患者居多,而阴性患者则以轻度为主。74例患者中31例为IL-10阳性、43例为IL-10阴性。IL-10阳性患者中的H.pylori阳性率(93.55%)显著高于IL-10阴性(69.77%)患者($P < 0.05$);病理分型的差异无统计学意义($P > 0.05$)。COX-2阳性表达率在H.pylori阳性患者中为59.32%,显著高于H.pylori阴性患者的20.00%($P < 0.01$);iNOS阳性表达率为61.02%,显著高于阴性患者的20.00%($P < 0.01$)。H.pylori阳性不同病理类型胃炎患者的IL-10阳性率差异无统计学意义($P > 0.05$);H.pylori阳性胃炎(IM+Dy)患者的COX-2阳性率(84.62%)高于CSG(44.00%)患者($P < 0.05$);CAG患者的iNOS阳性率(80.95%)显著高于CSG(44.00%)患者($P < 0.05$)。H.pylori阳性胃炎患者的IL-10表达与COX-2($r = -0.566$, $P < 0.001$)、iNOS($r = -0.465$, $P < 0.001$)表达均呈现显著负相关。结论:IL-10为H.pylori相关性胃炎的保护因子,在H.pylori阳性患者中具有高阳性率。且IL-10与H.pylori阳性患者的COX-2、iNOS表达呈较强负相关,可通过对COX-2、iNOS表达的下调作用降低慢性胃炎患者的恶性病变风险。

Abstract: Objective: To observe the expression of IL-10 in H.pylori-associated gastritis and its correlation with COX-2 and iNOS. Methods: 74 cases of H.pylori related gastritis were selected. H.pylori was tested to determine H.pylori infection. The histopathological examination was tested to determine the pathological type, the degree of inflammation of the gastric mucosa. The immunohistochemistry was used to detect the expression of IL-10, COX-2 and iNOS in gastric mucosa. The H.pylori infection, pathological diagnosis and histological typing results were analyzed. The relationships between H.pylori infection and pathologic inflammation and pathological type in patients with chronic gastritis were analyzed. The relationship between IL-10 expression and H.pylori infection was analyzed. The expression of COX-2 and iNOS in H.pylori-positive gastritis in different pathological types were compared. The correlations between IL-10 and COX-2, iNOS expression in H.pylori positive gastritis patients were analyzed. Results: In 74 cases of chronic gastritis patients, 59 cases were H.pylori positive and 15 cases were negative, the H.pylori detection rate was 79.73%. The patients of H.pylori positive and negative was significantly different in the degree of inflammation of the distribution ($P < 0.05$), manifested as H.pylori positive patients with moderate to severe inflammation, while the negative patients were mild mainly. The positive rate of H.pylori (93.55%) in IL-10 positive patients was significantly higher than that in patients with IL-10 negative (69.77%) ($P < 0.05$). There was no significant difference in pathological type ($P > 0.05$). The positive

expression rate of COX-2 in H.pylori positive patients was 59.32%, which was significantly higher than that in H.pylori negative patients (20.00%) ($P < 0.01$), and the positive expression rate of iNOS was 61.02%, which was significantly higher than that of negative patients (20.00%) ($P < 0.01$). There was no significant difference in the positive rate of IL-10 between different pathologic gastritis H.pylori positive patients ($P > 0.05$). The positive rate of COX-2 (84.62%) in patients with H.pylori positive gastritis (IM+Dy) was higher than that in CSG (44.00%) patients ($P < 0.05$), and the positive rate of iNOS (80.95%) in CAG patients was significantly higher than that in patients with CSG (44.00%) ($P < 0.05$). The expression of IL-10 in patients with H.pylori positive gastritis was significantly negatively correlated with COX-2 ($r = -0.566, P < 0.001$) and iNOS ($r = -0.465, P < 0.001$). Conclusion: IL-10 is a protective factor for H.pylori-associated gastritis and has a high positive rate in H.pylori-positive patients. The expression of COX-2 and iNOS was negatively correlated with IL-10 in H.pylori positive patients, and could reduce the risk of malignant lesions in patients with chronic gastritis by down-regulating the expression of COX-2 and iNOS. 【Key words】 Modern Oncology 2019,27(02): 0269-0274

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