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论著

胃良恶性病变组织中CHK1和PLK1的表达及意义

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摘要：

目的：研究胃良恶性病变组织中细胞周期检测点激酶1（CHK1）和Polo样激酶1（PLK1)的表达水平及其临床病理意义。方法：收集59例胃癌、20例癌旁组织、42例淋巴结转移灶及95例不同类型胃良性病变（浅表性胃炎20例，萎缩性胃炎20例，胃溃疡20例，胃息肉35例），手术切除或胃镜活检标本常规制作石蜡包埋切片。采用EnvisionTM免疫组织化学法检测CHK1和PLK1的表达。结果：胃癌组织CHK1表达阳性率明显高于各类型胃良性病组织（P＜0.01）；胃癌PLK1表达阳性率明显高于癌旁组织（P＜0.05）和各类型胃良性病变组织（P＜0.01），且PLK1 阳性表达的胃良性病变均呈不典型增生；CHK1和 PLK1在淋巴结转移灶和其相应原发灶中表达无明显差异（P＞0.05）；组织学分级II级病例CHK1表达阳性率明显低于组织学分级III＋IV级（P＜0.05）；无淋巴结转移病例CHK1 和PLK1表达阳性率明显低于淋巴结转移病例（P＜0.05）；胃癌组织中CHK1 和PLK1表达存 在相关性（P＜0.05）。结论：CHK1 和PLK1表达水平可能是反映胃癌发生、进展、生物学行为及指导临床辅助治疗的重要激酶类生物学指标。

关键词： 胃肿瘤 胃疾病 细胞周期检测点激酶1 Polo样激酶1 免疫组织化学

Expression of checkpoint kinase 1 and polo-like kinase 1 and its clinicopathological significance in benign and malignant lesions of the stomach

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Abstract:

ObjectiveTo determine the expressive level of checkpoint kinase 1 (CHK1) and polo-like kinase 1 (PLK1) and to detect their clinicopathological significance in benign and malignant lesions of the stomach.MethodsEnvision Tm immunohistochemistry was used to detect the expression level of CHK1 and PLK1 in conventional paraffin-embedded sections from specimens of primary foci (n=59)and metastatic foci of lymph node (n=42) of gastric cancer, peritumoral tissues (n=20),and benign lesions of the stomach (n=95). ResultsThe positive rates of CHK1 were significantly higher in gastric cancer than that in different types of benign lesions(P＜0.01). The positive rates of PLK1 were significantly higher in gastric cancer than that in peritumoral tissues (P＜0.05) and different types of benign lesions (P＜0.01),and the positive cases of PLK1 in benign lesion showed atypical hyperplasia. No significant difference of CHK1 and PLK1 expression was found between metastatic foci and corresponding primary foci (P>0.05). The positive rates of CHK1 and PLK1 were significantly lower in the non-metastatic lymph node than that in the metastatic lymph node (P＜0.05). The positive rate of CHK1 was significantly lower in histologic grade Ⅱ than that in the histologic gradeⅢ+Ⅳ(P＜0.05). Positive correlation was found between the expression of CHK1 and PLK1 in gastric cancer tissues (P＜0.01). ConclusionThe expression level of CHK1 and /or PLK1 might be important biological markers of kinases to reflect the carcinogenesis, progression, biological behaviors, and guide clinical auxiliary treatment of gastric cancer.

Keywords: stomach neoplasms；stomach diseases；checkpoint kinase 1；polo-like kinase 1；immunohistochemistry

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