Yes-associated protein: Early diagnosis of gastric carcinoma

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Yes-associated protein (YAP) is a type of cellular adaptor protein and transcriptional co-activator. In recent years, some investigators have found YAP to be overexpressed and highly activated in hepatic cancers and mammary cancers, suggesting its tumorigenicity. Survivin is a new member of the inhibitor of apoptotic protein (IAP) family, which was initially cloned by the cDNA of the effector cell protease receptor-1 in the human genomic library in 1997.

A research team led by Professor Yan Xin, from The Fourth Laboratory of Cancer Institute in China measured the expression of YAP and survivin in normal gastric mucosa, precancerous lesions and gastric carcinoma using an immunohistochemical method to analyze the significance and correlations of the 2 factors with gastric carcinogenesis. Their study will be published on August 28, 2009 in the World Journal of Gastroenterology.

The investigation found that the expression of YAP and survivin in gastric carcinoma were positively correlated, and according to the data, they speculated that YAP might induce a high expression of cell proliferation-related factors and apoptotic inhibitors, such as Ki67, cIAP1 and survivin. Survivin might participate in gastric carcinogenesis, progression and metastasis by inhibiting apoptosis of gastric carcinoma cells and regulating cellular mitosis. Whether YAP and survivin collaborate to contribute to gastric carcinogenesis and progression requires further study.

