World Journal of Gastroenterology

Submit a Manuscript: http://www.wjgnet.com/esps/
Help Desk: http://www.wjgnet.com/esps/helpdesk.aspx
DOI: 10.3748/wjg.v3.i4.262

World J Gastroenterol 1997 December 15; 3(4): 262
ISSN 1007-9327 (print) ISSN 2219-2840 (online)

BRIEF REPORT

Altered expression of tumor suppressors p16 and Rb in gastric carcinogenesis

Qi Zhou, Jian-Xiang Zou, Yu-Long Chen, Hui-Zhen Yu, Li-Dong Wang, Yong-Xin Li, Hua-Qin Guo, Shan-Shan Gao, Song-Lian Qiu

Qi Zhou, Jian-Xiang Zou, Yu-Long Chen, Hui-Zhen Yu, Li-Dong Wang, Yong-Xin Li, Hua-Qin Guo, Shan-Shan Gao, Song-Lian Qiu, Laboratory for Cancer Research, Medical Experimental Center, Zhengzhou 450052, Henan Province, China

Jian-Xiang Zou, Yu-Long Chen, Department of Gastroenterology, First Affiliated Hospital, Henan Medical University, Zhengzhou 450052, Henan Province, China

Hui-Zhen Yu, Henan Red-Cross Blood Station Center, Zhengzhou 450053, Henan Province, China

Received: April 11, 1997
Revised: May 25, 1997
Accepted: June 28, 1997
Published online: December 15, 1997

Abstract

AIM: To determine whether expression of the tumor suppressors p16 and Rb is altered in gastric carcinoma.

METHODS: Mucosal biopsies were endoscopically obtained from patients with superficial gastritis (n = 12), atrophic gastritis (n = 15), atypical hyperplasia (n = 20) and gastric cancer (n = 40). Upon obtainment, all samples were immediately fixed with 10% buffered formalin, embedded in paraffin, and sectioned serially. Protein expression of p16 and Rb was detected by immunohistochemistry (ABC method).

RESULTS: The gastric epithelium samples showed various degrees of nuclear immunostaining for p16 and Rb according to the different stage of lesion. Progressive pathology of the lesions was associated with a decreasing trend in positive immunostaining for p16 protein (83.3% > 73.3% > 30.0% > 27.5%) but an increasing trend for Rb protein (25.0% > 46.7% > 60.0% > 67.5%). A negative correlation was found between these two parameters and gastric cancer. Correlation analysis of the 40 cases of gastric cancer identified a negative correlation for 20 of the cases. When positive (n = 9) and negative tissues (n = 11) were compared, a statistically significant difference was found (50.0%, 22.5%, 27.5%) (P < 0.05).

CONCLUSION: Abnormal expression of p16 and Rb may play an important role in gastric carcinogenesis.

Key words: Genes, suppressor, tumor; Gene expression; Retinoblastoma protein/metabolism; Stomach neoplasms/metabolism; Carcinoma/metabolism

Zhou Q, Zou JX, Chen YL, Yu HZ, Wang LD, Li YX, Guo HQ, Gao SS, Qiu SL. Altered expression of tumor suppressors p16 and Rb in gastric carcinogenesis. *World J Gastroenterol* 1997; 3(4): 262 Available from: URL: http://www.wjgnet.com/1007-9327/full/v3/i4/262.htm DOI: http://dx.doi.org/10.3748/wjg.v3.i4.262

L- Editor: Filipodia **E- Editor:** Liu WX

Published by **Baishideng Publishing Group Inc**
8226 Regency Drive, Pleasanton, CA 94588, USA
Telephone: +1-925-223-8242
Fax: +1-925-223-8243
E-mail: bpgoffice@wjgnet.com
Help Desk: http://www.wjgnet.com/esps/helpdesk.aspx
http://www.wjgnet.com

ISSN 1007-9327