

Gastric Cancer Related Etiological and Prognostic Factors

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Gastric cancer is one of the most common cancers and the second common cause of cancer related death worldwide.¹ In one study it is was in the top position in the biopsy specimen in our country.² The incidence of and mortality from gastric cancer may vary according to the risk factors related to the cancer.³ Infection of stomach by the bacteria, *Helicobacter pylori* is an established factor for the development of gastric cancer, gastritis and peptic ulcer diseases.⁴ *H. pylori* is more associated with intestinal type of gastric cancer than diffuse type and gastric lymphoma. *H. pylori* infection in gastric mucosal biopsy specimen is usually detected by urease test, modified Giemsa stain, Haematoxyllin and eosin stain, and culture.⁵ Study on relation of gastric cancer factors are going on worldwide. Now, it is not limited to *H. pylori*. Other etiological and prognostic factors have been detected in the gastric cancer biopsy specimens. Human papilloma virus (HPV) and p53 gene expression in gastric cancer cells are found to be associated with gastric cancer.⁶⁻⁸

Vascular endothelial growth factor (VEGF) is a key factor in tumour angiogenesis which may promote tumour cell survival under hypoxic condition. Tumour VEGF expression has been shown to be significant marker for reduced survival rate of gastric cancer patients.⁹ In our country gastric cancer cases are usually evaluated by routine light microscopic histological examination of formalin-fixed, paraffin-embedded tissue section stained with Haematoxyllin and eosin stain. In other countries, researches are going on to disclose the etiological and prognostic factors of gastric cancer in paraffin embedded tissue sections by immunohistochemical (IHC) methods. By IHC method *H. pylori* antigens, HPV antigens, and over expression of p53 gene and VEGF have been studied in various countries. We usually preserve the paraffin embedded tissue blocks in our histopathology laboratories for farther review or reexamination, if necessary. As there are several factors incriminated for gastric cancer we can examine the archive specimen by IHC for the presence of various factors for development of gastric cancer in our country.

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