

### **Biological Prognostic Parameters in Gastric Carcinomas**

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#### **Abstract**

Gastric cancer is the second leading cause of cancer mortality worldwide. (1) Gastric carcinogenesis involves a variety of factors including diet, habitual factors as well as environmental factors. (2,3) This study aimed to correlate clinicopathological parameters of the cases studied and PCNA and p53 expression using immunohistochemistry. The study group included a total of 32 patients that underwent gastrectomy for gastric cancer. The study parameters were represented by epidemiological aspects (age, sex), clinical characteristics (signs and symptoms), histopathological findings (pTNM staging and degree of differentiation, histological classification, lymph nodes status and presence of vascular invasion) and survival, and immunohistochemical analysis (p53 and PCNA expression) of the study group. Histopathological study showed that most of the cases (26 cases) were of the intestinal type and 6 cases of the diffuse type. Immunohistochemical analysis of p53 protein expression showed an average of 20.75% positive cells, while PCNA expression showed an average of 47.3%. In terms of survival there were 6 cases of death at intervals ranged from 2-189 days, 5 cases had subsequent presentations over 12 months, while 8 patients were lost to follow-up. At the time of surgery, 6 patients had distant metastases, while 6 more developed them in a period of 2-12 months after surgery. Identification of biomolecules that highlight potentially aggressive tumors may help modulate the therapeutic approach after surgical resection.

**Key words:** gastric carcinoma, survival, prognostic markers

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