Introduction

Gastric carcinoma is the commonest malignant tumour of the stomach ***(Fletcher, 2000).*** Its incidence show large geographic differences world wide with the lowest rate occurring in most Western Industrialized Countries including the United States and United Kingdom, in contrast, relatively high rates of gastric carcinoma occur in Japan, Korea and China ***(Lynch, et al., 2005).***

Although the incidence and mortality of gastric carcinoma are decreasing in many countries, gastric carcinoma still represents the second most frequent malignancies in the world and the fourth in Europe ***(Kelly and Duggan, 2003).*** The Median age of affection is 55 years with male to female Predominance 2:1 ***(El.Bolkainy, et al., 2005).***

Gastric carcinoma, as all cancer, is the end result of the interplay of many risk factors. Although the epidemiological evidence indicates that environmental factors as low socioeconomic state, diet, drugs, smoking and Helicobacter pylori play a major role in gastric carcinogenesis ***Shang&Pena, 2005).***

In addition to environmental risk factors, a genetic predisposition is obvious in some cases as germ-line mutations of E-cadherin gene in familial gastric cancer of diffuse histological type ***(Fletcher, 2000).***

There are many precancerous conditions as atrophic gastritis with intestinal metaplasia, gastric adenoma, the post-gastrectomy gastric stump and Menetrier's disease ***(Brunicardi,et al., 2005).***

The overall 5-years survival of gastric carcinoma is generally poor and is about 5 to 15% **.** The survival is dependent on pathological stage (TNM) and degree of tumor differentiation ***(Rustgi and Crawford,2003).***

The prognosis for Gastric carcinoma has been found to be related to several-factors as patient's age, location within the stomach, depth of invasion, tumor size, microscopic type, grading, regional Lymph node involvement, DNA ploidy, mitotic figures and cell cycle regulators ***(Rosi, 2004).***

Nucleolar organizer regions (NoRs) are loops of ribosomal DNA (rDNA) occurring in the nucleoli of cells **.** The count of AgNORs has been proposed as a useful method for evaluation of cell replication in human tumors ***(Pich, et al., 2000).***

P_{27} cyclin dependant kinase inhibitor is a negative regulator of cell cycle progression. In association with various cyclins, different cyclin dependant kinases regulate progression through various stages of cell cycle. (Cyclin-cdk) are in turn regulated by phosphorylation events and cyclin dependant kinase inhibitors ***(Fiorentino, et al., 2000).***

Cyclin dependant kinase inhibitors can be divided into two structurally related families. Ink4 group of proteins (p15, p16, p18 and p19) which inhibit cyclin D/cdk 4-6 complexes, and Cip/Kip group (p21, p27 ad p57) which inhibits cyclin/cdk complexes that contain cdk2. In many epithelial malignancies decreased expression of p27 correlates with high grade, early recurrence and poor prognosis as occur in hepatocellular and laryngeal carcinomas ***(Chetty , 2003).***