

## ABSTRACT

Gastric cancer is currently the second most common cause of cancer death in the world and the fifth most common cancer and the fourth leading cause of cancer related death in Europe. It has been evident for over 20 years that *H. pylori* is involved in the development of gastric adenocarcinoma. The *cagA* gene of *H. pylori* is the main virulence factor that leads to the development of gastric adenocarcinoma through the derangement of cellular architecture and signaling. The objective of our work is to study the prevalence of Cag A among Gastric cancer patients.

This descriptive study was done on 60 gastric cancer, at the age group of 22 to 78 years old. They were 30 males and 30 females. All patients were subjected to full history taking, complete clinical examination, laboratory investigations including Hemoglobin, Plt, Tlc, Albumin, ALT, AST, GGT, ALP, Total&Direct bilirubin, Urea, Creatinine, Na, k, Ca, Phos, Uric acid.

*H.pylori* work up was done by Serum samples were provided from the patients to be tested to detect Anti *H pylori* IgM and Anti CagA IgG. Serum samples will be stored at  $-80^{\circ}\text{C}$  until serological testing will be performed using (*Helicobacter pylori* line IgA/IgG immunoblot GB

Also all the patients done Computerized tomography (CT) scan of abdomen & pelvis with contrast and Upper endoscopy and biopsy taking and if needed CT guided biopsy followed by histopathological examination.

Our results showed that 34 patients(56.67%) are Cag A +ve and 26 patients(43.33%) are Cag A -ve with no statistically significant difference as regard the gender or age.

We concluded that Cag A play significant role in development of gastric cancer in patients who were infected by *H pylori*.

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**Keywords:** Gastric cancer, *H.pylori*, CAG A, Incidence of gastric cancer in eastern and western countries.