INVESTIGATIONS ON GASTRO PROTECTIVE EFFECT OF RABBIT ANTI-RAT GASTRIN ANTIBODY IN WISTER ALBINO RAT

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Albino rats are being used as an animal model for the most of the immunological studies due to their capability to acclimatize quickly with the food and ambient environment and generation of faster immune response. During the present study Antigastrin antibodies induced by active immunization of preformed antibodies in which all gastrin activity and other hormone function of G17, G34 are blocked. The Albino rabbits were challenged with 0.25ml of rat gastrin and Freund’s adjuvant given subcutaneously (SC) in 1:10 ratio on 0, 14, 24, 28th days. Ulcers of Minute, sporadic, punctuate lesion to several large lesion were observed in various groups.

Gastric ulcer is caused by imbalance between stomach acid and gastric mucosal defense mechanism that normally protects the gastrin mucosa from acid damage. The area of gastrin immunology mainly concern with the induction of antibody useful for identifying anatomic sites producing gastrin G17 or G34 in laboratory animals. Attempt to control gastrin levels by antigastrin antibodies induced by active immunization or passive administration of preformed antibodies would produce a deleterious state in which all gastrin activity and other hormone function of G17, G34 together with Cholecystokinin would be blocked and eliminated.