ID: 1801

**Congress:** The First International Congress of Medical Bacteriology  
**Title:** Inhibition of H.pylori growth by IgY-HpUc  
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**Abstract:** Background and Objectives: Helicobacter pylori is a Gram-negative, spiral, microaerophilic bacterium that infects the stomach of more than 50% of the human population worldwide. Passive immunization with oral administration of IgY antibodies has shown to be effective in inhibiting intestinal infection with variety of intestinal pathogens. We aimed to Inhibition of H.pylori growth by IgY-HpUc.

Methods: After injection of UreC Recombinant protein of Helicobacter pylori bacterium to white leghorn hens, Immunization of hens was confirmed by indirect ELISA technique produced IgY was precipitated from egg yolk, using poly ethylene glycol methods. Colony forming units (CFU) were determined after incubation of H. pylori with IgY-HpUc in order to estimate adhesion potential of IgY-HpUc to the bacterium. H.pylori was cultured in BHI for 48 hours to reach 109 bacteria/ml. One mg of IgY-HpUc was added to 1 ml of the bacterial suspension and incubated for 30 minutes at 37 °C. It was then spread on Brucella agar. BSA was used instead of IgY-HpUc to serve as negative control. The colonies grown on the agar media were comparatively counted.

Results: After incubation of purified IgY-HpUc with H. pylori, colony forming units was reduced to 35% while same amount of IgY-HpUc reduced the control non urease producing bacterium, E.coli colony forming units only about 6%. The growth arrest brought about by BSA, as negative control was about 5% after 48 hours.

Conclusions: IgY-HpUc inhibits growth of H.pylori with specific interaction with bacterium. Therefore IgY-HpUc could be efficient in treatment of gastric infection by this bacterium by inhibiting its colonization.

**H.pylori, IgY-HpUc, E.coli, urease, hens**

**Presentation:** Poster