

## KJ-19 Evaluation of a health food supplement containing anti-*H. pylori* urease IgY antibody on patients with chronic gastritis in Hanoi, Vietnam

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### **[Background]**

*Helicobacter pylori* is considered the leading cause of gastritis, gastric ulcer and stomach cancer. Medication with a combination of 2-3 antibiotics is the common therapy of *H. pylori* infection. But antibiotic therapy fails in 10-20% of cases due to the development of antibiotic resistance. Studies conducted by IRIG (Gifu, Japan) in the past 10 years show that egg antibody (IgY) against urease of *H. pylori* is effective in reducing the bacterial load in stomach of *H. pylori* positive volunteers. This study was conducted to examine if combination of the antibody with current treatment regime could improve the eradication rate and clinical signs in *H. pylori* positive gastritis patients.

### **[Methods]**

Volunteers were recruited among patients visiting 108 hospital. The volunteers that passed the selection criteria were divided into a test and a control group. Both groups were treated with a current treatment regime but only the test group received IgY-containing food supplement (GastimunHP, EW Nutrition Japan) as an adjunctive measure for 15 days. The subjects were examined before and 4 weeks after the treatment initiation by UBT and gastro-endoscopy.

### **[Results]**

71 patients who were positive with *H. pylori* and had gastritis or gastro-duodenal ulcer were divided randomly into test (n = 36) and control (n = 41) groups. The average UBT levels in the test group at baseline and 4 weeks posttreatment were 161.64 ± 83.53 and 49.42 ± 44.21, respectively. There was a significant decrease in UBT in this group after the treatment (p < 0.0001). 28 patients in this group became *H. pylori* negative by UBT test (77.78%). The UBT levels for the control group were 158.54 ± 43.73 at baseline and 73.37 ± 30.0 at 4 weeks, respectively, and the difference was statistically significant (p < 0.0001). 17 patients in this group became *H. pylori* negative by UBT test (41.46%). Mean changes of UBT in the test and control group were 112.22 ± 43.73 and 85.17 ± 37.9, respectively, and the difference between the 2 groups was statistically significant (P = 0.002). Clinical symptoms including stomach pains, nausea, bloating, belching, and vomiting had a tendency to improve faster in the test group compared to the control group.

### **[Conclusions]**

Food supplement fortified with IgY against urease of *H. pylori* enhances eradication of *H. pylori* when used in combination with medicines. This antibody could be useful especially in case of antibiotic-resistant *H. pylori* infections.

### **[Key words]**

*H. pylori*, IgY, food supplement