Heliobacter pylori infection in healthy people

Sir,—We have recently published the results of an epidemiological study in Gut reporting discrepancies between active Heliobacter pylori (Hp) infection determined by means of the 'C-urea breath test and the prevalence of anti-Hp antibodies in healthy volunteers. Further developments in serological tests make it necessary to report additional information and to reconsider our conclusions based on the serological data presented in the paper.

A systemic humoral immune response to H pylori has been searched for in many studies (including our own) by simple serological tests, some of which have become commercially available. They have all in common that whole bacterial cells were primarily used as antigen (acid glycine extracts or sonicated bacteria, especially Campylobacter jejuni). False positive serological test results can therefore not be excluded. Thus new serological tests using purified high molecular outer membrane proteins of H pylori and urease as antigens have been developed. These second generation serological tests may be more specific for Hp infection.

We have investigated the sensitivity and specificity of several different serological tests in a population of patients in whom the presence or absence of H pylori infection was unequivocally established. These patients all had upper gastrointestinal tract endoscopy with antral mucosal biopsies that were used for microbiological Hp (both culture and a urease test (CLO test) and they all underwent a 'C-urea breath test. Sera were used only from patients in whom either all three tests were positive (H pylori infection present) or all three tests were negative (infection absent). These latter patients were also questioned about treatment with antibiotics within the past six months and included in the present analysis only if the response was negative. Sera from this population were tested for anti-Hp antibodies with our own enzyme linked immunosorbent assay ELISA and two commercially available, first generation serological tests (anti-Hp IgG EIA Roche, Hoffman-La Roche, Basel, Switzerland; and anti-Hp IgA, Bäl Laboratory, Glatbrugg, Switzerland) and a new second generation serological test that uses a well characterised, highly immunogenic, purified Hp-specific multicomponent antigens preparation free of cross reacting flagella proteins (anti-Hp IgG EIA Roche second generation, Hoffman-La Roche). Sera from 223 patients were tested; 64 patients hadHp infection and 159 did not. The sensitivity and specificity of the four serological tests are shown in the Table.

Medical treatment of bleeding peptic ulcer: old drugs, new regimens

Sir,—Haemorrhage from peptic ulcer is due to the erosion of artery at the ulcer base by the continued digestive action of the gastric juice. Platelet plug and clot formation (both factors being pH sensitive) seal the bleeding artery. Dissolution of the clot is the most important factor for peptic ulcer rebleeding. Intragastric acidity prolongs the duration of bleeding as the gastric juice contains fibrinolytic substances and a pH <7 results in inhibition of platelet aggregation and dissolution of the clot. Under normal conditions, however, only then, after ingestion of a low pH med- 4 (35%) and 3 (35%) on May 11, 2022 by guest. Protected by copyright. http://gut.bmj.com/ Gut: first published as 10.1136/gut.32.11.1429 on 1 November 1991. Downloaded from