

GASTRITIS IN A HUMAN ASSOCIATED WITH A GASTRIC SPIRILLUM OTHER THAN *CAMPYLOBACTER PYLORI*. B.J. Marshall, K.R. Dye, H.F. Frierson, R.L. Guerrant, R.W. McCallum. Department of Internal Medicine, University of Virginia, Charlottesville, VA 22908.

A 36 y.o. female presented for evaluation of epigastric pain and bloating of at least 15 years duration. The pain was partially relieved by antacids, food, and cimetidine. Physical exam revealed only mild epigastric tenderness. Endoscopy was normal. Biopsies were obtained of the antrum and body mucosa. A rapid urease test (CLOtest) from the body mucosa was positive while the antral specimen was negative. H&E stain revealed active chronic gastritis, most severe in body mucosa. Giemsa stain revealed bacteria with 5-10 spirals, 0.5u in diameter and 15u in length. They did not adhere to the gastric mucus cells but were often seen within apparently healthy parietal cells. Morphologically, the organisms resembled "*Spirillum rappini*" which is commonly seen in the stomach of cats and thought to be only mildly pathogenic in these animals. (Am.J.Vet.Res.1958;19:677-80). Our patient was treated with bismuth subsalicylate 512 mg QID (day 1-21), amoxicillin 2 gm/d (d7-21), and metronidazole 1.5 gm/d (d18-21). At follow up 1, 3, and 6 months post therapy, histology was normal, without spiral organisms, and the patient was asymptomatic.

We conclude that this new spirillum is capable of inciting an inflammatory response in the gastric mucosa but unlike *C.pylori*, "*S.rappini*" prefers to colonize gastric mucosa containing parietal cells. Its presence in a human suggests that the cat itself may be a useful animal model for *C.pylori*.

DOES PEPTIC ULCER DISEASE OCCUR WITHOUT NON-STEROIDALS OR *CAMPYLOBACTER PYLORI*? David F. Martin, M.D.; Elizabeth Montgomery, M.D.; Arthur S. Dobek, Ph.D.; Geoffrey A. Patrissi, M.S.; and David A. Peura, M.D., FAGG; Walter Reed Army Medical Center, Washington, D.C. and USAF Medical Center, Keesler AFB, Mississippi.

Non-steroidal anti-inflammatory drugs (NSAID's) cause gastric ulcers, and *Campylobacter pylori* (CP) has been associated with duodenal and gastric ulcers. The absence of these two risk factors should reduce the likelihood that dyspeptic symptoms are due to ulcer disease. NSAID's use, determined by questionnaire, and levels of specific I_gG and I_gA to CP, determined by ELISA, were measured in 107 subjects presenting for endoscopy. Sixty were dyspeptic patients, 28 were disease controls, and 19 were healthy volunteers. Among the dyspeptic patients, 51/60 (85%) were either on NSAID's or had I_gG or I_gA to CP; 23/60 (38%) had an ulcer. 9/60 (15%) were not on NSAID's and did not have antibody to CP; and none of them had ulcers, p<.05. Considering all subjects, 87/107 (81%) were either on NSAID's or had antibody to CP; 28/87 (32%) had ulcers. 20/107 (19%) were not on NSAID's and did not have antibody to CP, and none of them had ulcers, p<.01. Use of NSAID's and presence of I_gG or I_gA to CP are risk factors for peptic ulcers. If patients are not on NSAID's and don't have antibody to CP, their risk for ulcer disease is negligible.

THE PREVALENCE OF *CAMPYLOBACTER PYLORI* INFECTION IN THE SPOUSE OF INFECTED PATIENTS. B.J. Marshall, K.R. Dye, S.R. Hoffman, M. Plankey, R.L. Guerrant, R.W. McCallum. Department of Internal Medicine, University of Virginia, Charlottesville, VA 22908.

The route of transmission of *C.pylori* remains unknown. If person to person spread is common, we propose that the infection would be more prevalent in spouses of infected patients than in age-matched controls. Method: Patients attending for investigation of possible *C.pylori* infection underwent endoscopic biopsy and culture of the gastric mucosa (n=31) or C-14 urea breath test (n=14). (Marshall BJ, J.Nuc.Med.1988;29(1)). The spouse was asked to undergo breath testing if he/she had not eaten for 4 or more hours. No qualifying spouse refused the test. Results: The infection was significantly more prevalent in the spouses of infected patients (60%) than in those of the non-infected patients (27%) (p=0.035).

	PATIENT	
	POS	NEG
SPOUSE	POS 18 NEG 12	4 11
TOTAL	30	15

In the 40-60 year age group, 7 spouses of 11 infected patients had *C.pylori*. Half of the infected spouses had significant dyspeptic symptoms. Of 5 non-infected spouses in this age group, only 1 spouse had *C.pylori* (0.1 > p > 0.05 Fishers Test). We conclude that *C.pylori* is more common in the spouses of infected patients than in age matched controls. This increased prevalence of infection may reflect transmission between husband and wife or common source exposure.

RATES OF ADVERSE REACTIONS TO CIMETIDINE AND RANITIDINE. Robert Morton, M.D., F.A.C.G., Anita Das, M.S., Jake Jacobs, M.P.A., Nancy Fox, M.S. Center for Economic Studies in Medicine, Pracon Incorporated, Reston, VA.

A review of the literature regarding toxicity of the H₂ antagonists provides conflicting reports on whether any of the available agents affords a greater opportunity for patient safety. Luckily, the most severe adverse reactions to H₂ antagonists are reasonably rare. Therefore, a comparative analysis was undertaken, utilizing an enormous secondary data resource.

Data provided by the Pennsylvania Medicaid program were reviewed to monitor for the occurrence of untoward conditions associated with H₂ antagonist therapy. This provided the opportunity to study more than 57,000 patients and nearly 260,000 periods of exposure to the H₂ antagonists. Rates of adverse reactions were calculated for each group, and adjusted for differences in patient age, race, sex, prescribed dosage, and prior history of anti-ulcer medication.

Several important differences were found. The rates of reported gastrointestinal side effects (constipation and diarrhea) were significantly higher for the ranitidine group (121.8 per 10,000) versus the cimetidine group (94.0 per 10,000). Reported pancreatitis (27.8 per 10,000) and tachycardia (8.0 per 10,000) were also found to be significantly more common in the ranitidine population than the cimetidine group (12.6 per 10,000 and 4.4 per 10,000, respectively). No significant differences were found in rates of central nervous system, dermatological or musculoskeletal reactions, nor in rates of impotence or mental confusion.

The striking differences uncovered call for a replication of this study, using data representing a more heterogeneous patient population.