● G1082

RISK FOR DEVELOPING GASTRIC CARCINOMA IN PATIENTS COLONIZED BY *cag*A POSITIVE *HELICOBACTER PYLORI* STRAINS. DMM Queiroz, EN Mendes, GA Rocha, AMR Oliveira, CA Oliveira, PP Magalhães, SB Moura, [1]MMMDA Cabral, [1]AMMF Nogueira. Laboratory of Research in Bacteriology and [1]Department of Pathology, Faculdade de Medicina, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brazil.

In developed Western countries *cag*A positive strains were found to be more common in patients with gastric carcinoma than in controls. However, in Far Eastern countries, although the prevalence of *cag*A positive strains is high in gastric carcinoma patients, differences have not been observed between patients with and without gastric carcinoma. Therefore, we evaluated, in a cross-sectional case control study, the risk of infection with *cag*A-positive ***H. pylori*** strains in the development of proximal and distal gastric carcinoma in Brazil. We also assessed the likelihood of detection of the ***H. pylori*** *cag*A gene directly from the gastric mucosa and from the corresponding ***H. pylori*** strain isolated from gastric carcinoma patients. ***H. pylori*** positive patients with gastric carcinoma (15 with proximal and 109 with distal tumor) and 124 sex and age (± 1 year) matched ***H. pylori*** positive patients without gastric carcinoma or peptic ulcer were studied. Fragments of the mucosa of the antrum and of the corpus were obtained for histological study, ***H. pylori*** isolation and tissue PCR analysis. Serum antibodies against CagA protein were evaluated by a commercial immunoblot assay (Helicoblot 2.0). DNA from ***H. pylori*** strains and gastric tissue were PCR-amplified using 2 sets of synthetic oligonucleotide primers for *cag*A and 1 for *ure*A. The sensitivity of blotting in detecting antibodies to CagA protein was 83.3% for gastric carcinoma patients and 93.3% for control patients and the sensitivity of the *cag*A tissue PCR was the same (96.7%) for both groups. Considering the results as a whole, 116 (93.5%) patients with gastric carcinoma and 82 (66.1%) controls were colonized by a *cag*A-positive strain. An increased risk to develop gastric carcinoma was observed in patients harbouring *cag*A-positive strains (OR=7.4; CI 95%, 3.14 to 18.15; $p=10^{-7}$). This was true for both the intestinal and diffuse types of tumour as well as for males and females. When the data were stratified by localization of the tumours *cag*A-positive strains were linked only to distal tumours. Risk to develop proximal carcinoma was not increased by *cag*A-positive status (p=1; OR=1.37, CI 95%, 0.13 to 4.05). We also observed that *cag*A-positive strains were most often seen in patients with more intense infiltration of mononuclear and polymorphonuclear cells in the antral mucosa. In conclusion, we found that *cag*A-positive strains were more frequently observed in gastric carcinoma patients than in patients without peptic ulcer or gastric carcinoma which reinforces the hypothesis that *cag*A-positive strains play an important role in the pathogenesis of gastric carcinoma.

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DIFFERENTIAL EFFECTS OF NSAIDS ON NO-SYNTHASE ACTIVITY. M.C. Ramírez, S. Calatayud, B. Beltrán, M.D. Barrachina, J.V. Esplugues. Dept. of Pharmacology, University of Valencia, Spain.

Background: The main problems associated with the use of NSAIDs are gastrointestinal side effecs classically related to inhibition of prostaglandin production. However recent studies suggest that modulation of NO synthase activity may also be involved since COX-1 and NO-synthase show many structural similarities. **Aim:** To evaluate the effects of NSAIDs on NOS activity. **Methods:** Stomachs were obtained from Sprague-Dawley rats and homogeneized in buffer containing DL-dithiotreitol (1mM), leupeptin (10μg.ml^{-1}), soybean trypsin inhibitor (10 μg. ml^{-1}) and aprotinin (2μg.ml^{-1}). After centrifugation (10 000 g, 20 min, 4° C), the supernatant was aliquoted and frozen (-80°C) until use. Experiments were performed in assay buffer (pH 7.4) containing L-valine (6mM); NADPH (1mg.ml^{-1}); $MgCl_2$ (1mM) and $CaCl_2$ (200μM) and NSAIDs (0.1mM), this concentration of NSAIDs was chosen from preliminary dose-response study. Samples were preincubated for 30 min at 37° C, and the reaction was started by addition of L-arginine (20μM) and L-(^{14}C)-arginine monohydrocloride (0.27 μCi, 11.8 GBq nmol^{-1}). After the incubation period, 30 min at 37° C, the reaction was terminated by the addition of 1 ml of Dowex-AG50W exchange resin. NO-synthase activity was evaluated as the conversion of L-(^{14}C)-arginine as described previously (Biochem. Biophys. Res. Commun. 1992; **184,** 680-685).

Results: *(means ± S.E.M. n=5)*

NSAIDs	% CHANGE in NO-synthase activity vs control
AAS	-20 ± 6
Indomethacine	-35 ± 4
Diclofenac	-80 ± 2
Flurbiprofen	+21 ± 3.25
Carprofen	+32.5 ± 5.07
Piroxicam	*no effect*
Paracetamol	*no effect*

Conclusion: There is no similar pattern of effects of the various NSAIDs assayed in regard with their action on NO synthase activity and this may explain some differences in their ability to induce gastric damage.

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ERADICATION INDEX OF *HELICOBACTER PYLORI* (Hp) WITH PANTOPRAZOLE (PANTO)+CLARITHROMYCIN (CLA)+AMOXICILLIN (AMO) FOR TEN DAYS: AN OPEN, MONOCENTRIC STUDY: PRELIMINARY REPORT. [1]Ramirez-Barba EJ, [2]Zarate AR, [1]Di Silvio M, [2]Mendoza A, [1]Lopez-Gaytan T, [1]Sanchez-Gonzalez JM, [1]Marquez H, [1]Dibildox M, [1]Almaguer I. [1]University of Guanajuato. School of Medicine. [2]H E CMN Leon IMSS, Mexico. Department of Gastroenterology.

AIM: To compare the efficacy of PANTO+CLA+AMO (PAC) for 10 days in the eradication rate (ER) of Hp, in a highly Metronidazole (MET) resistant population. **INTRODUCTION**: As was already shown (Dehesa et al, GUT 1997;41(3):767 A211), in Mexico, 94% Hp ER can be achieved with 14 days PAC therapy in duodenal ulcer patients. In order to minimize cost, length and adverse events, several authors had proposed a 10 days therapy as an cost-effective alternative. **MATERIAL AND METHODS**: 50 patients with endoscopically proven peptic ulcer (PU), or ulcer like dyspepsia (NUD) were included into this clinical study to receive PANTO 40mg bid, CLA 500mg tid and AMO 1g bid in a 10 days scheme (PAC), patients with PU continue with PANTO 40mg om for 4 or 8 weeks until ulcer healing was achieved. The test was considered negative and the patient eradicated when 14C-urea breath test (PY-test), has < 150 disintegrations per minute 4 weeks after end of all treatment. **RESULTS:**

GROUP	n	ER	CI 95%
PAC	44 (35/44)	79.6%	66-93

Analysis of 44 key point available patients showed that 37.5% of Hp strains were resistant to MET (E-test). According to this preliminary report 10 days therapy with PAC had excellent patient compliance and all adverse events were antibiotic related. **CONCLUSIONS**: A 14 days proton pump inhibitor based triple therapy without MET seems to be a reliable option. The high primary resistance rates to MET could account for a different biological behavior of Hp strains and for the relatively low eradication rate found after 10 days triple therapy in our study.

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SUPERIORITY OF 20MG PANTOPRAZOLE (PANTO) VS 150mg × 2 RANITIDINE (RANI) IN HEALING AND SYMPTOM RELIEF OF PATIENTS WITH MILD REFLUX ESOPHAGITIS. [1]Ramirez-Barba E.J., [2]Di Silvio M., [2]Dibildox M., [3]Moguel A., [3]Rodriguez F., [2]Almaguer I., [3]Andrade P., [4]Fischer R., [4]Klein M., [4]Wurst W. and the Mexican pantoprazole study group in GERD. [1]University of Guanajuato, School of Medicine. [2]Clinical Research, Byk Gulden Mexico. [3]Clinical Research, Novartis Pharma Mexico. [4]Clinical Research, Byk Gulden Konstanz Germany.

AIM: To compare the healing, symptom relief and tolerability of 20mg PANTO vs 2x150mg RANI in patients with mild reflux esophagitis. **INTRODUCTION**: Symptomatic reflux is a common complaint in the adult population. Proton pump inhibitors have been demonstrated to be a reliable choice in the treatment of at least symptomatic gastroesophageal reflux disease (GERD). **MATERIAL AND METHODS**: 271 adult patients with endoscopic evidence of GERD grade I (Savary-Miller) were included in this prospective, randomized, unbalanced (PANTO2:1RANI), double blind, double dummy, multicenter study conducted in Mexico. Either 20mg PANTO om or RANI 150mg bid were given for a maximum of 8 weeks. Control endoscopies were performed at week 4 and if not healed at week 8. **RESULTS**: 260 per protocol (PP) patients (PANTO n=174 RANI n=86), with no significant differences in gender and age, H. pylori status were endoscopically evaluated at the initial visit. The corresponding healing rates* are shown in the following table:

PP	PANTO 20	CI95%	RANI	CI95%	p
4w	**89.7%** (156/174)	84-94	**74.4%** (64/86)	64-83	**0.001**
8w	**96.0%** (167/174)	92-98	**88.4%** (76-86)	80-94	**0.03**

*Fisher exact test

Symptom relief was evaluated in both groups at week 4: the PANTO group showed to be significantly superior to RANI in the number of patients totally relieved of heartburn (89%, p=0.008) and vomiting(94%, p=0.0001). PANTO also was superior in the relief of day-time pain 83%, night-time pain 77%, nausea 82% and acid regurgitation 88%. H. pylori status with CLOtest at the initial endoscopy: 47% positive and 53% negative. Adverse events were 1.1% in both groups. **CONCLUSIONS**: PANTO 20mg om was significantly superior to RANI 150mg bid in terms of healing rates (at week 4 and 8) and symptom relief (week 4). Both drugs were equally well tolerated.

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