● G0357

EVALUATION OF 2 DOSES OF CLARITHROMYCIN WITH METRONIDAZOLE AND LANSOPRAZOLE FOR 7 DAYS IN ERADICATION OF *H. PYLORI*. C. Charles+, M. Sue+, T. Wyatt+, H. Reid+, E. Morris+, B. Marshall*, D. Peura*,. +University of Guyana School of Medicine, Turkeyen, Guyana; *University of Virginia Health Science Center, Charlottesville, VA.

OBJECTIVES: This study was designed: (1) to compare efficacy in eradicating H. pylori (HP) of 2 doses of clarithromycin (250mg vs 500mg) with lansoprazole 30mg and metronidazole 500mg all given bd for 7 days. (2) to assess pre treatment metronidazole and clarithromycin resistance (if any); on efficacy and (3) to compare mean symptom scores (MSS) in responders with non responders. **METHODS:** Of 81 dyspeptic patients gastroscoped, 55 (67.9%) who were CLO+ve on antral gastric biopsy evaluation were randomized to receive LMC250 or LMC500. Cultures for HP were performed on biopsies and antimicrobial susceptibility tests (metronidazole and clarithromycin) conducted on isolates. Baseline B/T (+= > 100 dpm) confirmed HP infection at entry. 4 weeks post treatment, B/T were repeated to confirm HP eradication. Repeat endoscopy, culture and sensitivity were performed in non responders. At 6 mths, a third B/T evaluated HP recurrence. MSS (0-4: epigastric pain, nausea, vomiting, heartburn, belching, bloating, pain relief after meals, hunger pains. Max=32) were scored at entry, 4 weeks and 6 months. **RESULTS:** 5/55 (9.1%) CLO+ve patients were withdrawn (3 baseline -ve B/Ts, 1 returned LMC, 1 culture result uncertain). 27/50 (54%) CLO+ve, B/T+ve patients were culture+ve for HP. Isolates from 3/27 (11.1%) showed resistance to metronidazole only. At 4 weeks follow up 43/50 (86.0%) had -ve B/T;7/50 were B/T+ve culture-ve. All 21/43 responders re-tested by 6-mth B/T remained HP-ve. Of 6/7 non-responders re-tested at 6-mths, 5/6 remained HP+ve (1 late responder). MSS at entry: responders (13.9) non responders (18.6); at 4 weeks: responders (6.4) non responders (4.2). In vivo resistance to metronidazole did not occur.

	(N)	AGES	M/F	4 WK ERAD RATES	6 MTH RECUR RATES
LMC250	27	27 - 74 (49.0)	11/16	26/27 (96.3%)	0/13 (0%)
LMC500	23	22 - 68 (43.3)	8/15	12/23 (73.9%)	0/8 (0%)

CONCLUSIONS: (1). Both LMC250 and LMC500 given for 7 days were effective in eradicating HP. (2). Only primary metronidazole resistance was documented. (3). There was poor correlation between symptoms and eradication when responders and non responders were compared. (4). Recurrence of HP does not appear to occur.

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● G0358

HISTOLOGIC DIAGNOSIS OF *H. PYLORI* IN DYSPEPTIC PATIENTS: A COMPARISON AMONG PATHOLOGISTS. C. Charles+, M. Sue+, H. Reid+, D. Hooper+, E. Morris+, D. Peura.* +University of Guyana School of Medicine, Turkeyen, Guyana. *University of Virginia Health Science Center, Charlottesville, VA.

OBJECTIVES: This study was designed to: (1). correlate the presence of the Helicobacter pylori (HP) organism with the histological grade of inflammatory appearance of tissue obtained from gastric antral biopsies of dyspeptic patients. (2). correlate the presence of gastritis and duodenal ulcers (DU) at upper endoscopy with HP positivity (organism identified by histology). (3). compare histological interpretations by 3 independent uninformed pathologists. **METHODS:** 60 dyspeptic patients, submitted to upper endoscopy and antral gastric biopsy, had histological examination (i) for the presence or absence of HP organisms by both Hematoxylin and Eosin (H&E) and Warthin-Starry (W-S) stains (ii) for the severity of histological grade of inflammation (0-3). Endoscopic and histological findings were each correlated with the presence or absence of HP organisms. The endoscopic findings were recorded as normal, gastritis alone, or gastritis with DU. (HP+ve, HP-ve=agreement among pathologists with respect to presence or absence of HP; HP+ve/-ve=disagreement). **RESULTS:** HP organisms were visualized (i) by H&E in 33/60 (55%) of the specimens examined (ii) by W-S in 19/60 (32%). The correlation between the pathologists with respect to the reading of H&E slides for HP was 41/60(68%). For W-S, it was 47/60 (78%).

	INFLAMATORY GRADE				ENDOSCOPIC FINDINGS		
	Grade 3	Grade 1&2	Grade 0		Normal	Gastritis	DU/Gast.
HP+ve	20 (95%)	13 (50%)	0 (%)	Hp+ve	8 (44%)	21 (60%)	4 (57%)
Hp-ve	0 (0%)	2 (8%)	6 (46%)	HP-ve	5 (28%)	3 (9%)	0 (0%)
Hp+ve/-ve	1 (5%)	11 (42%)	7 (54%)	HP+ve/-ve	5 (28%)	11 (31%)	3 (43%)
Totals	21 (35%)	26 (43%)	13 (22%)	**Totals**	18 (30%)	35 (58%)	7 (12%)

CONCLUSIONS: (1). Gastritis and duodenal ulcer/gastritis were diagnosed endoscopically in 2/3 of dyspeptic patients. (2). HP organisms were identified in gastric antral biopsies by the H&E staining technique (55%) more commonly than with W-S (32%). (3). Level of interobserver variation between 3 pathologists for H&E histological diagnosis of HP (32%) was greater than for W-S (22%). (4). High correlation between HP positivity and histological grade 3 (severe) and HP negativity and grade 0 (normal) were observed.

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G0359

EFFECT OF LANSOPRAZOLE (L) ON THE STEADY-STATE PHARMACOKINETICS OF METRONIDAZOLE (M) FOLLOWING CONCOMITANT ADMINISTRATION OF BOTH DRUGS IN 24 HEALTHY VOLUNTEERS. Chassard D[(1)], Gualano V[(2)], Forestier S[(3)], Millérioux L[(2)], Joubert M[(3)]. [(1)]Aster Paris, [(2)]Céphac Saint-Benoît, [(3)]Laboratoires Takeda Puteaux, France.

Triple therapy, proton pump inhibitor (PPI) associated with 2 antibiotics (metronidazole, clarithromycin and amoxicillin) has been the selected treatment for the *Helicobacter pylori* infection in 1997.

The **aim** of this study was to evaluate the effect of the administration of lansoprazole on the pharmacokinetic parameters of metronidazole.

Subjects and Methods: 24 male volunteers participated in this controlled randomized double-blind crossover study. Over three periods of 5 days, morning and evening, each received either lansoprazole 30 mg and metronidazole placebo, lansoprazole placebo and metronidazole 500 mg or lansoprazole 30 mg and metronidazole 500 mg. A wash-out period of 10 days was observed between each treatment phase. On day 5 of each treatment phase, blood samples were taken over 12 hours following the last administration (T 1.0h, T 1.5h, T 2.0h, T 3.0h, T 4.0h, T 5.0h, T 6.0h, T 8.0h, T 10.0h and T 12.0h) in order to analyze plasma concentration of L and M (HPLC with UV detection, developed and validated at Cephac - limits of quantification: L=5 ng/ml, M=0.1µg/ml).

Results: Tolerability of treatment was satisfactory. Pharmacokinetic parameters of lansoprazole and metronidazole are shown in the following table:

	Lansoprazole Cmax ($ng.ml^{-1}$)	Lansoprazole tmax (h)	Lansoprazole AUC_{0-12} ($ng.ml^{-1}.h$)	Metronidazole Cmax ($\mu g.ml^{-1}$)	Metronidazole tmax (h)	Metronidazole AUC_{0-12} ($\mu g.ml^{-1}.h$)
L	801.5 (± 355.5)	1.6 (± 0.7)	2006.0 (± 1653.5)			
M				16.30 (± 3.34)	1.31 (± 0.48)	126.80 (± 28.11)
L + M	875.2 (± 388.5)	1.5 (± 0.6)	2202.1 (± 1956.2)	16.61 (± 2.87)	1.46 (± 2.87)	129.22 (± 24.87)
P	NS	NS	NS	NS	NS	NS
90% CI	0.94-1.28		0.96-1.22	0.97-1.08		0.99-1.06

Conclusion: The study has shown that multiple oral administration of 60 mg/d of lansoprazole has no effect on the steady-state bioavailability of metronidazole and vice versa.

● G0360

THE INTESTINAL PHENOTYPE OF THE COLUMNAR LINED (BARRETT'S) ESOPHAGUS. P Chaves(1), A Suspiro(2), P Cardoso(1), A Dias Pereira(2), JC Mendes de Almeida(3), C Nobre Leitão(2), J Soares(1). (1)Departamento de Patologia Morfológica, (2)Servico de Gastrenterologia e (3)Servico de Cirurgia do Instituto Português Oncologia Francisco Gentil, Lisboa, Portugal

BACKGROUND: Barrett's esophagus is histologically characterized by two distinct types of columnar epithelium (Spechler, 1996): with and without specialized intestinal metaplasia (with and without SIM). The former is associated with the risk of subsequent adenocarcinoma and its intestinal phenotype is recognized by the presence of goblet cells. The phenotype of the columnar non-goblet cells, the prevalent cell type of Barrett's epithelium, is not clear (Felix, 1996). **AIM:** This study was undertaken to clarify the phenotype of Barrett's epithelium cell populations. **METHODS:** Sucrase-isomaltase (SI) intestinal enzyme was determined by immunohistochemistry in paraffin-embedded samples. Twenty-six esophageal biopsies with Barrett's metaplasia and 12 Barrett's adenocarcinomas with adjacent metaplastic epithelium were evaluated. Normal esophageal, gastric and ileal mucosas were used as controls. **RESULTS:** In Barrett's metaplasia without adenocarcinoma, the columnar cells expressed SI in 69% (18/26) and 46% (12/26) of the cases, in the areas with and without SIM, respectively. Only 8/12 cases of Barrett's adenocarcinoma had adjacent areas with SIM available for immunohistochemistry; in Barrett's epithelium adjacent to adenocarcinoma, the columnar cells expressed SI in 100% (8/8) and 67% (8/12) of the cases in the areas with and without SIM, respectively. Seven of the 12 carcinomas (58%) expressed SI. Goblet cells never expressed SI as well as normal esophageal (n=37) and gastric (n=15) mucosa. Normal ileal mucosa (n=12) showed always SI expression. **CONCLUSIONS:** 1) The intestinal phenotype of the columnar non-goblet cells of Barrett's epithelium is identified in areas both with and without SIM. 2) The presence of SI in the columnar non-goblet cells suggests that they might constitute an incomplete form of intestinal metaplasia. 3) The histological diagnosis of Barrett's esophagus should also rely on the intestinal phenotype of the columnar non-goblet cells.

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