

METABOLIC EFFECTS BY H. PYLORI INFECTION AND ERADICATION.

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Cornejo-Pareja I¹, Roca-Rodríguez MM^{2,3}, Coín-Aragüez L^{3,4}, Molina-Vega M¹, Díaz-Perdigones C¹, Hernández-García C¹, Muñoz-Garach A¹, Alcaide-Torres J⁴, CluFernández C¹, Viñuela-González L⁵, Mora-Navas L⁵, Mancha-Doblas I¹, Tinahones FJ^{1,3,4}.

¹Endocrinology and Nutrition Department. Virgen de la Victoria Hospital, Málaga, Spain. ²Endocrinology and Nutrition Department. Línea de la Concepción Hospital, Cádiz, Spain. ³CIBER CB06/003, Carlos III Health Institute, Madrid, Spain. ⁴Research laboratory IBIMA, Málaga, Spain. ⁵Microbiology Department. Virgen de la Victoria Hospital, Málaga, Spain.



INTRODUCTION

H. pylori infection has been related with diseases such as type 2 diabetes and metabolic syndrome.

MATERIAL AND METHOD

A prospective study of 40 non-diabetics patients were performed.

VARIABLES ANALYZED:

Clinical data, carbohydrate and lipid metabolism; and ghrelin and GLP1 levels before and after antibiotic eradication treatment.

OBJETIVE

To evaluate changes in carbohydrates metabolism induced by 75 g oral glucose tolerance test (OGTT) and lipids metabolism, before and after antibiotic eradication treatment in patients colonized by H. pylori.

RESULTS

Table 1. Clinical variables.

Sex	♀ 60%	♂ 40%
Age	46.95 ± 2.02 years	
Family history of digestive disorders	70%	
History of Gastrointestinal Disease 57.5%	GERD → 12.5%	
	PEPTIC ULCER → 12.5%	
Use Ranitidine after antibiotic treatment	31.6%	

Table 2. Clinical and analytical variables pre- and post-treatment.

variables.	Pre-treatment visit	Post-treatment visit	p
Weight (Kg)	72,69 ± 1,95	72,64 ± 1,99	0,845
WC (cm)	92,11 ± 1,96	91,28 ± 1,09	0,302
BMI (Kg/m2)	26,90 ± 0,71	26,92 ± 0,71	0,916
HbA1c (%)	5,41 ± 0,08	5,29 ± 0,06	0,014
Basal glucose	93,68 ± 1,26	93,47 ± 1,23	0,809
30 Post-OGTT glucose	156,16 ± 5,67	150,74 ± 5,05	0,28
60 Post-OGTT glucose	159,24 ± 9,75	147,05 ± 9,40	0,018
120 Post-OGTT glucose	120,46 ± 6,41	110,43 ± 6,81	0,019
Basal insulin	8,12 ± 1,00	8,63 ± 1,00	0,354
30 Post-OGTT insulin	47,93 ± 4,13	60,14 ± 5,58	0,085
60 Post-OGTT insulin	76,54 ± 9,40	76,65 ± 10,01	0,989
120 Post-OGTT insulin	62,80 ± 7,22	56,23 ± 9,15	0,359
C-peptide	2,26 ± 0,12	2,33 ± 0,13	0,316
CRP	4,12 ± 0,41	3,56 ± 0,34	0,255
Triglycerides	96,53 ± 6,57	93,50 ± 5,90	0,632
Total Cholesterol	190,76 ± 6,21	191,34 ± 6,03	0,882
LDL-Chol	118,74 ± 5,59	117,96 ± 5,42	0,836
HDL-Chol	52,34 ± 2,05	55,37 ± 2,65	0,021
Basal Ghrelin	17,82 ± 2,11	12,98 ± 1,54	0,05

Table 3. Significant correlations between pre and post-treatment.

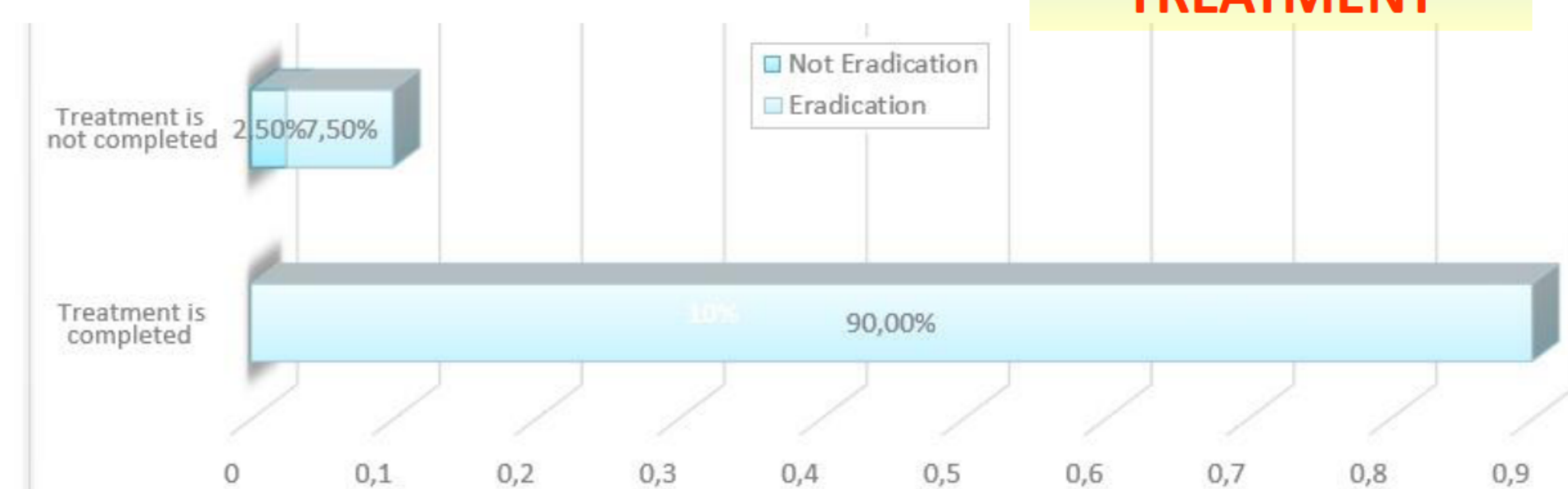
	PRE-TREATMENT		POST-TREATMENT	
	Weight	BMI	Weight	BMI
C-peptide	+	+	+	+
Basal Glucose	+	+	+	+
Basal Insulin	+	+	+	+
120 post OGTT glucose	+	+	+	+
120 post OGTT insulin	+	+	+	+

	PRE-TREATMENT		POST-TREATMENT	
	Triglycerides		Total-Chol	Total-Chol
HbA1c	+			
C-peptide	+			
120 post OGTT glucose	+			
120 post OGTT insulin	+			
HDL-Cholesterol	-			
Basal Glucose			+	+
Basal Insulin			+	+

CONCLUSIONS

- The H. pylori eradication includes improvements in carbohydrate and lipid metabolism.
- Significant correlations between anthropometric measurements, carbohydrates and lipids metabolism, both before and after treatment, were found.
- We did not find significant correlations between ghrelin or GLP-1 levels with metabolic parameters, pre or post-treatment.
- More than 95% of patients achieve H. pylori eradication with conventional antibiotic treatment.

ANTIBIOTIC TREATMENT



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