

# #95 - HELICOBACTER PYLORI DIAGNOSTIC TESTS AND INDICATIONS OF TREATMENT FROM THE LATIN AMERICAN REGISTRY ON THE MANAGEMENT OF HELICOBACTER PYLORI INFECTION (Hp-LATAMReg)

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**Background:** There is limited information regarding the best approach for *Helicobacter pylori* (*H. pylori*) management in Latin America.

**Objectives:** Describe the *H. pylori* diagnostic tests and indications of treatment in Latin America.

**Methods:** A multicenter, retrospective, international registry (Hp-LATAMReg) was conducted. Information about therapies used by gastroenterologists in six countries (Argentina, Chile, Colombia, Costa Rica, Mexico, and Peru) from 2015 to 2023 was registered in an e-CRF AEG-REDCap database. The most frequent indications for treatment and diagnostic tests before and after eradication treatment were described.

**Results:** 1,378 patients were registered, of which 933 (68%) were female. The mean (SD) age of the patients was 53 (14) years. 524 patients (38%) were from Mexico, 210 patients (15%) from Argentina, 210 (15%) from Chile, 200 (14%) from Colombia, 176 (13%) from Peru and 58 (4.2%) from Costa Rica. 1218 (89%) were treatment naïve. The most frequent indication for treatment were non-investigated dyspepsia (n=526, 38%) and dyspepsia with normal endoscopy (n=334, 24%). The main *H. pylori* diagnostic methods before the eradication treatment were: histology (n=905, 67%), rapid urease test (RUT) (n=196, 14%) and <sup>13</sup>C urea breath test (UBT) (n=180, 13%). To assess post-treatment eradication, the most frequent *H. pylori* diagnostics test used were: stool antigen (SA) monoclonal test (n=530, 39%), <sup>13</sup>C UBT (n=400, 29%) and <sup>14</sup>C UBT (n=215, 16%). There were statistical differences between the countries regarding the indication for treatment and the diagnostics methods before and after the eradication therapy (Table 1).

**Conclusions:** In Latin America, there was marked heterogeneity between the countries regarding the main indications of treatment and the most frequently used diagnostics tests for *H. pylori* infection. It is necessary a consensus on the management of *H. pylori* infection in Latin America.

Country	Argentina (n=210)	Chile (n=210)	Colombia (n=200)	Costa Rica (n=58)	Mexico (n=524)	Peru (n=176)	Overall (n=1,378)
<b>Indication of Helicobacter pylori eradication</b>							
Non-investigated dyspepsia	20 (9.5%)	8 (3.8%)	36 (18%)	0 (0%)	322 (61%)	140 (80%)	526 (38%)
Dyspepsia with normal endoscopy	153 (73%)	117 (56%)	20 (10%)	0 (0%)	19 (3.6%)	25 (14%)	334 (24%)
Duodenal Ulcer	11 (5%)	2 (1%)	5 (2.5%)	1 (1.7%)	24 (4.6%)	1 (0.6%)	44 (3.2%)
Gastric Ulcer	12 (5.5%)	2 (1%)	13 (6.5%)	6 (10%)	38 (7.3%)	5 (2.8%)	76 (5.5%)
Preneoplastic lesions	0 (0%)	2 (1%)	0 (0%)	10 (17.2%)	29 (5.5%)	0 (0%)	41 (3%)
MALT Lymphoma	1 (0.5%)	0 (0%)	0 (0%)	0 (0%)	2 (0.4%)	0 (0%)	3 (0.2%)
First-degree relatives of patients with gastric cancer	0 (0%)	12 (5.7%)	9 (4.5%)	8 (14%)	3 (0.6%)	4 (2.3%)	41 (3%)
Unexplained iron deficiency anemia	2 (0.9%)	2 (1%)	14 (7%)	0 (0%)	2 (0.4%)	0 (0%)	20 (1.5%)
Other	11 (5%)	65 (31%)	103 (52%)	33 (57%)	80 (15%)	1 (0.6%)	293 (21%)
<b>Diagnostic test before eradication</b>							
<sup>13</sup> C UBT	6 (2.9%)	0 (0%)	0 (0%)	0 (0%)	94 (17%)	80 (46%)	180 (13%, p<0.001*)
<sup>14</sup> C UBT	0 (0%)	0 (0%)	0 (0%)	0 (0%)	41 (7.8%)	10 (5.7%)	51 (3.7%, p<0.001*)
Serology	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (0.2%)	0 (0%)	3 (0.2%, p=0.428)
SA Monoclonal Test	3 (1.4%)	13 (6.2%)	4 (2%)	3 (5.2%)	5 (1%)	0 (0%)	28 (2%, p<0.001*)
SA Polyclonal Test	2 (0.1%)	0 (0%)	0 (0%)	0 (0%)	18 (3.4%)	0 (0%)	20 (1.5%, p<0.001*)
Histology	199 (95%)	25 (12%)	196 (98%)	42 (72%)	357 (68%)	86 (49%)	905 (66%, p<0.001*)
RUT	0 (0%)	179 (85%)	0 (0%)	13 (22%)	4 (0.8%)	0 (0%)	196 (14%, p<0.001*)
Culture	0 (0%)	0 (0%)	0 (0%)	1 (0.1%)	0 (0%)	0 (0%)	1 (0.1%, p<0.001*)
Stool PCR test	0 (0%)	0 (0%)	0 (0%)	2 (3.4%)	0 (0%)	0 (0%)	2 (0.1%, p<0.001*)
<b>Diagnostic test after eradication</b>							
<sup>13</sup> C UBT	58 (28%)	69 (33%)	0 (0%)	0 (0%)	171 (33%)	102 (58%)	400 (29%, p<0.001*)
<sup>14</sup> C UBT	4 (1.9%)	1 (0.5%)	0 (0%)	0 (0%)	138 (26%)	72 (41%)	215 (16%, p<0.001*)
SA Monoclonal Test	143 (68%)	85 (41%)	198 (99%)	52 (90%)	52 (9.9%)	0 (0%)	530 (39%, p<0.001*)
SA Polyclonal Test	1 (0.5%)	3 (1.4%)	0 (0%)	0 (0%)	124 (24%)	0 (0%)	128 (9.3%, p<0.001*)
Histology	8 (3.8%)	16 (7.6%)	2 (1%)	4 (6.9%)	35 (6.7%)	1 (0.6%)	66 (4.8%, p<0.001*)
RUT	0 (0%)	41 (20%)	0 (0%)	2 (3.4%)	0 (0%)	0 (0%)	43 (3.1%, p<0.001*)
Stool PCR test	0 (0%)	0 (0%)	0 (0%)	2 (3.4%)	0 (0%)	0 (0%)	2 (0.1%, p<0.001*)

**Table 1.** Main indications of *H. pylori* eradication and diagnostic tests before and after the treatment in Latin America. The number of tests is not equal as the number of patients because more than one test could be conducted.

\*Chi-square test. MALT = mucosa-assisted lymphoid tissue; UBT = Urea Breath Test; SA = Stool Antigen; RUT = Rapid Urease Test.

