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Anthropometric Indicators in Children Referred to a Tertiary-level Public Health Care Institution from Buenos Aires, Argentina

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Introduction: Stunting is a multifactorial phenomenon with a high prevalence in developing countries. *Helicobacter pylori*, a bacterium that colonizes the gastric mucosa, has been related to growth impairment due to micronutrient malabsorption. However this hypothesis remains controversial. **Objective:** The aim of our work was to determine anthropometric indicators in children referred to a Tertiary-level Public Health Care Institution from Buenos Aires, Argentina, for upper gastrointestinal symptoms evaluation. **Methods:** 525 children (4-16 y) assisting to the Gastroenterology Unit of the Hospital de Niños "Sor María Ludovica", La Plata, Argentina, were diagnosed for *H. pylori* infection by the 13C-Urea Breath Test. Weight and height were measured for calculation of anthropometric indicators height for age (HAZ), weight for age (WAZ) and Body Mass Index for age (BMI) using the Anthro Plus 2007 software of the World Health Organization. Statistical analysis was performed by Student's t Test, Mann-Whitney Test and lineal regression. **Results:** Prevalence of *H. pylori* infection was 25.1% (95% CI, 21.5-29.5), with a mean age of the children similar in both groups, 10.1y (95% CI, 9.8-10.3y). Mean HAZ and WAZ were -0.40 (95% CI, -0.57-[-0.22]) and -0.31 (95% CI, -0.51-[-0.11]) in the positive group, and -0.18 (95% CI, -0.28-[-0.09]) and -0.10 (95% CI, -0.21-0.01) in the negative group. HAZ was significantly lower in the positive group (p=0.04), while no significant differences were found for WAZ (p=0.07) and BMI for age (p=0.20) between both groups. However, after adjusting for confounding factors these differences were no longer significant. Stunting was found in 4.5% (95% CI, 2.1-9.6) and 3.3% (95% CI, 1.9-5.6) of the *H. pylori* positive and negative children respectively, while underweight was observed in 5.3% (95% CI, 2.6-10.5) and 6.7% (95% CI, 4.6-9.6) of the above mentioned groups. **Conclusions:** Prevalence of stunting and underweight were low in the studied population. Although the evaluated anthropometric indicators tended to be lower for the *H. pylori* positive children, the differences were not statistically significant.