Association of Helicobacter Pylori Infection and Giardiasis

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Background & Objectives: To investigate whether *Helicobacter pylori* (H pylori) infection is associated with Giardiasis infection, presence of enteroparasites, and other surrogates of fecal exposure.

Methods: We conducted a cross-sectional study in 121 children consecutively admitted at a educational- hospital in Grgan, Iran. Serum & Stool specimens were examined for the presence of *H. pylori* and parasites. A structured questionnaire inquiring about sanitary conditions and life style was applied to each subject.

Results: Fifty-one of the 121 children (42.1%) were found to be seropositive for *H pylori*, and 45 (37.2%) for *Giardia labelia* and 21(17.3%) for both *H pylori* and Giardia labelia. The seroprevalence of *H pylori* and *G.labelia* both increased significantly with age. After controlling for possible confounding, the variables remaining independently associated with seropositivity to *H. pylori* were age, presence of *Giardia lamblia* in feces (OR = 3.2, 95%CI, 1.1-9.5) and poor garbage disposal quality (OR = 2.4, 95% CI, 1.1-5.1).

Conclusion: Our data suggest that *H. pylori* infection is associated with surrogate markers of fecal exposure. Thus, we conclude that the fecal-oral route is relevant in the transmission of HP among children in an urban setting of a developing country. The association observed between *G. lamblia* and *H. pylori* infection may have several explanations. Further studies to investigate this relationship are warranted.

Keywords: Association, *Helicobacter pylori*; Giardiasis