Letter to the Editor

Helicobacter pylori Infection and Anemia

Dear Sir:

In their comprehensive and rigorous study on the etiology of anemia in Côte d’Ivoire, Righetti and others reported high prevalence of anemia (45–75%), inflammation, and deficiencies of iron, riboflavin, and vitamin A. The factors that were significantly and positively linked to the prevalence of anemia differed by age group: (1) infection with *Plasmodium falciparum* in 6- to 23-month-old children, (2) cellular iron deficiency and chronic inflammation in 6- to 8-year-old children, and (3) cellular iron deficiency in non-pregnant young women. Identifying modifiable risk factors like the factors reported by Righetti and others is highly important and can help in establishing interventions aimed at reducing the burden of anemia.

*Helicobacter pylori* colonizes the stomach; typically, it is acquired in childhood and causes asymptomatic chronic infection, which is highly endemic in developing countries. A small portion of *H. pylori*-infected subjects develop peptic ulcers and gastric carcinoma, usually in late adulthood. In well-designed studies, *H. pylori* was found to be associated with increased likelihood of iron deficiency anemia (IDA); furthermore, anti-*H. pylori* therapy substantially reduced the percentage of children affected with IDA. In a community-based study among Arab children in Israel, we found significantly lower mean hemoglobin levels in children ages 6–9 years who were infected with *H. pylori* compared with their uninfected peers. *H. pylori* was also associated with low ferritin levels. In a systematic review and meta-analysis, we found higher prevalence of IDA in *H. pylori*-infected subjects than uninfected ones (pooled odds ratio = 2.8; 95% confidence interval = 1.9–4.2).

We recommend the investigation of *H. pylori* infection as a potential factor that might play a role in the occurrence of anemia in this population. Trials on the impact of anti-*H. pylori* therapy on the burden of anemia and IDA could shed light on whether the association between *H. pylori* and these disorders is causal.

Khitam Muhsen
Center for Vaccine Development
University of Maryland School of Medicine
Baltimore, Maryland
E-mail: kmuhsen@medicine.umaryland.edu

Dani Cohen
Department of Epidemiology and Preventive Medicine
School of Public Health
Sackler Faculty of Medicine
Tel Aviv University
Tel Aviv, Israel
E-mail: dancohen@post.tau.ac.il

REFERENCES