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CORRESPONDENCE

To the editor:

Helicobacter pylori and idiopathic thrombocytopenic purpura in children

Helicobacter pylori gastritis has been associated with autoimmune diseases, including idiopathic thrombocytopenic **purpura** (**ITP**).[1,2] It is well known that the prevalence of *H pylori* infection is greatly variable from country to country, has decreased over the last decades in industrialized countries, and that its frequency increases with age. Recently, Veneri et al[3] suggested that the HLA class II allele pattern might identify groups of **ITP** patients with different incidences of *H pylori* infection and, possibly, with different pathogeneses of thrombocytopenia. Indeed, eradication of *H pylori* in adults has been associated with platelet recovery in patients from Italy[1,2,4] and from Japan[5] but not in patients from Spain.[6] To our knowledge, no *H pylori* data have been published from pediatric patients with **ITP**. In children, **ITP** differs from that in adults in terms of clinical picture and mechanisms of thrombocytopenia.

We therefore studied the prevalence of *H pylori* infection in a group of 17 children with chronic **ITP**. The patients had normal or increased megakaryocytosis in the bone marrow despite isolated thrombocytopenia that had lasted at least 6 months. Of the patients, 10 were girls and 7 were boys. Median age at the time of diagnosis was 3.8 years (range, 0.3-14.3 years), and median duration of thrombocytopenia at the time of the study was 3.9 years (range, 0.6-14.5 years). During a routine outpatient visit of the 17 consecutive patients, after informed consent, serum *H pylori* IgA and IgG class antibodies were measured by a locally validated enzyme immunoassay,[7] and in patients older than 5 years (n = 12), a ^{13}C urea breath test (Diabact UBT) also was performed. The ^{13}C enrichment in the expired breath was measured by automated breath ^{13}C analysis by means of continuous flow-isotope ratio mass spectrometry.[8] Delta-over-baseline (DOB) values were analyzed. DOB over 2.2‰ was considered positive. If any abnormalities were noted, *H pylori* antigen enzyme immunoassay was done in stool specimens.

H pylori infection was not diagnosed in any of the 17 patients. One patient had borderline titers of class IgG antibodies in the serum, but class IgA antibodies were negative and no antigen was detected in the stools. Two other patients had positive breathing tests (DOB 17.9‰ and 9.5‰), but their serum antibodies test as well as stool antigen tests were negative.

In recent studies from Finland, an *H pylori* seroprevalence of 5.6% was found in children younger than 19 years[9], and seroprevalence of 30% to 40% was found in adults.[10] The absence of infection signs in our pediatric **ITP** patients suggests that *H pylori* may not be enriched in this Finnish subgroup of patients. This is in contrast to findings in adult **ITP** patients, in which an increased prevalence of *H pylori* has been published in many different populations.[1-6] In France, where the infection rate is low, no association between the 2 conditions has been found.[11] No such data on adult **ITP** patients are available from Finland.

ITP is an autoimmune disorder with different pathogenetic and clinical features in children and adults. Although *H pylori* infection can well be important in the pathogenesis of thrombocytopenia in some adults with **ITP**, this may not be the case in children, especially in the Finnish population with a low prevalence of *H pylori* infection.

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