The geographic origin of each studied woman. Birth and residency during the first 5 years of life determined the study. An enzyme-linked immunosorbent assay for detecting antibodies was obtained from all women at the beginning of screening. Written consent for detection of serum samples, respectively, were collected at the second center (see 169 and 302 asymptomatic pregnant women were collected during the first period and 302 during the second one. Of these, 69 and 82 were collected during the second one. Of these, 69 and 82

The purpose of our study was to evaluate the incidence of Helicobacter pylori seropositivity in two different populations of asymptomatic pregnant women from different geographic origins during two separate time periods. A retrospective study of consecutive sera obtained from 169 and 302 asymptomatic pregnant women in 1990 and 1999, respectively, was carried out. The global H. pylori seroprevalences for 1990 and 1999 were 21.3 and 21.5% (where P is nonsignificant), respectively. For both periods the H. pylori seroprevalences were significantly higher in non-French pregnant women (66.6 and 50.6%) than in French pregnant women (18.7 and 11.2%) (P = 0.01 and 0.001, respectively). H. pylori seroprevalence in French pregnant women decreased significantly from the first period (18.7%) to the second one (11.2%) (P = 0.03).

Calculation of the mean and standard deviation for all quantitative parameters was done by use of the StatView system. Differences between groups and seroprevalences according to geographic regions were assessed by the chi-square test of homogeneity for categorical variables. (The Yates formula was used for small samples).

| Parameter                        | Value for groupa |
|----------------------------------|------------------|
| Patients (no.)                   |                  |
| Total                            | 169              |
| First maternity ward             | 100              |
| Second maternity ward            | 69               |
| Geographic origin (no. with characteristic/total no.) |              |
| France                           | 160/169 (94.6)   |
| Other than France                | 9/169 (5.4)      |
| North Africa                     | 5                |
| Africa                           | 2                |
| West Indies                      | 1                |
| Far East                         | 1                |
| H. pylori seroprevalence (no. seropositive/total no.) |              |
| Total                            | 36/169 (21.3)    |
| French women                     | 30/160 (18.7)    |
| Non-French women                 | 6/9 (66.6)%      |
| North Africa                     | 3/5 (60)         |
| Africa                           | 1/2 (50)         |
| West Indies                      | 1/1 (100)        |
| Far East                         | 1/1 (100)        |

a Values in parentheses are percentages.

b H. pylori seroprevalence was significantly higher in non-French women than in French women in the period of 1990 (P = 0.01).

c H. pylori seroprevalence decreased significantly in French women from the first period (1990) to the second one (1999) (P = 0.03).

d H. pylori seroprevalence was significantly higher in non-French women than in French women in the period of 1999 (P = 0.001).

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used when the number of subjects was less than five.) All tests performed were two tailed, with \( P \) values of \(<0.05\) considered significant.

The mean ages of the women from the first and second study periods were 28.7 ± 0.3 and 29.9 ± 0.25 years, respectively. Global \( H. pylori \) seroprevalences for the first and second periods were 21.3% (36 of 169 women) and 21.5% (65 of 302), respectively, the difference being nonsignificant. French women represented 160 of 169 women (94.6%) during the first period and 223 of 302 (73.8%) during the second one. \( H. pylori \) seroprevalences were significantly higher in non-French women than in French women during both the first and second periods: 66.6% (6 of 9 women) versus 18.7% (30 of 160) \( (P = 0.01) \) during the first period and 50.6% (40 of 79) versus 11.2% (25 of 223) \( (P = 0.001) \) during the second period (Table 1).

\( H. pylori \) seroprevalence decreased significantly in French pregnant women from the first period to the second one: 18.7% (30 of 160) versus 11.2% (25 of 223) \( (P = 0.03) \). No difference was seen in the seroprevalences in non-French women, 66.6% (6 of 9) versus 50.6% (40 of 79) \( (P \) is not significant), between the two periods (Table 1).

This study shows that \( H. pylori \) seroprevalence in asymptomatic pregnant women varies according to geographic origin. \( H. pylori \) seroprevalence is very low in Western European countries (10.6% in Finland [1] and 15.5% in Belgium [3]) in comparison to those in other countries (44.8% in Turkey [5], 62.5% in the United States [4], and 88% in Egypt [2]). \( H. pylori \) seroprevalence in the present study is approximately 21.5%, closely comparable to that of other Western European countries.

Finally, our study shows that \( H. pylori \) seroprevalence in French pregnant women decreased from 18.7 to 11.2% \( (P = 0.03) \) from 1990 to 1999, which is in agreement with the decreasing \( H. pylori \) seroprevalence in other Western European countries. No conclusion may be drawn as to seroprevalence in pregnant women in developing countries, where \( H. pylori \) remains a public health issue.

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