Dear Sir,

Since the observations by Marshall et al. [1], Helicobacter pylori, a spiral shaped, gram-negative microorganism, has been linked with the occurrence of gastric diseases, e.g. chronic gastritis, especially of the antral type [2]. Patients with end-stage renal failure have been shown to have an increased incidence of gastroduodenal lesions [3]. Because H. pylori urease converts urea to ammonia which provides a high local pH necessary for bacterium survival [2], it has been speculated that a high urea content of the mucus in the stomach in uremic patients might predispose to H. pylori infection [4, 5].

The aim of our study was to assess the frequency of H. pylori infection in 2 groups of patients with antral gastritis: 21 chronically hemodialyzed uremic patients (9 men and 12 women, age 21-55 years, mean ± SD 36.8 ± 13.2), and an age-matched control group consisting of 22 patients (10 men and 12 women) with dyspepsia. The studies were performed during routine endoscopic examinations. In both groups histopathological symptoms of antral gastritis were detected, with moderate activity according to Sidney classification [6]. The search for H. pylori was carried out with a urease test and was always confirmed by histological examination (modified Giemsa method) [2]. Biopsy specimens were obtained from the antral region of the stomach. All uremic patients were dialyzed three times per week, 5-hour sessions (Gambro AK 10, dialyzers with polysulfone membrane). None of the examined patients had ever been treated with colloidal bismuth, and none had received antibiotics during the 2 months before the study. For statistical analysis the χ² test was employed.

The characteristics of the examined patients and the results obtained are presented in Table 1. H. pylori infection was indicated in 61.9% of the hemodialyzed patients and in 63.6% with the control group. The difference was not significant. In all patients with a positive urease
test, histological examination confirmed the presence of H. pylori. Our results are similar to
the sparse literature data [4, 5, 7-9], and confirm that end-stage renal failure treated with
chronic hemodialysis does not seem to affect the possibility of H. pylori infection. These
results also indicate that the urease test may be useful for the detection of H. pylori infection
in uremic patients.

Table 1. Characteristics of the examined patients and the results obtained

<table>
<thead>
<tr>
<th>Hemodialyzed patients</th>
<th>Control group</th>
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<tbody>
<tr>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Age, years (mean ± SD)</td>
<td>36.8 ± 13.2</td>
</tr>
<tr>
<td>Months on hemodialysis (mean ± SD)</td>
<td>28 ± 12.2</td>
</tr>
<tr>
<td>Presence of H. pylori, number of patients</td>
<td>10</td>
</tr>
<tr>
<td>34.8 ± 12.1</td>
<td>63.6%</td>
</tr>
</tbody>
</table>

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E-Mail karger@karger.ch Fax + 41 61 306 12 34 http://www.karger.ch
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