



Helicobacter pylori and metabolic syndrome

To the Editor,

Helicobacter pylori (HP) is a common infectious agent worldwide that primarily affects the upper gastrointestinal system. However, it has been shown that HP might also have a role in various extraintestinal diseases such as metabolic syndrome (1). Metabolic syndrome is a major public health problem that is associated with increased cardiovascular disease and related deaths. Therefore, it is important to clearly document the association between HP and metabolic syndrome. In this regard, I have read the article by Işıktas Sayilar et al. (2) titled "Relationship between Helicobacter pylori infection and metabolic syndrome" which showed that HP is an important risk factor for metabolic syndrome. It is a well-designed prospective study, but there are some limitations about the study.

First, increased body mass index (BMI) is an independent risk factor for hyperlipidemia and elevated fasting plasma glucose and insulin levels (components of metabolic syndrome). In the present study, the HP-positive group had a higher mean BMI value than the HP-negative group, which has effects on the plasma lipoprotein, fasting glucose, and insulin levels regardless of the bacteria status (3). Therefore, the association between HP and plasma lipoprotein/fasting glucose/insulin levels is unclear in this study.

Secondly, plasma lipoprotein and glucose levels can be affected by the commonly used medications such as diuretics, beta blockers, corticosteroids, and estrogen/progesterone preparations. Therefore, medications used by the patient should be questioned while determining the exclusion criteria of the study (4).

Thirdly, thyroid diseases, which could affect the components of metabolic syndrome such as plasma levels of lipoproteins/glucose, blood pressure, and BMI, should be investigated in those patients (5).

Finally, as noted by the authors, dietary factors and activity habits are important factors that affect the plasma

glucose, lipoprotein, and insulin levels and BMI; these factors should be evaluated in the patients.

Consequently, it should be considered that metabolic syndrome criteria can be affected by many factors regardless of the bacteria status. Hence, when inspecting the relationship between metabolic syndrome and HP, these factors should be considered.

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Editorial office staff reached out to Işıktas Sayilar et al. and requested them to reply to this letter.

Işıktas Sayilar et al. did not respond to editorial office's e-mails.