

Type 2 diabetes and *Helicobacter pylori* infection: Starting point for the reality?

Sir,

We have read with great interest article about association of *Helicobacter pylori*. Infection with type 2 diabetes Bajaj *et al.*^[1] In this cross-sectional study, the prevalence rate of *H. pylori* infection in type 2 diabetes, and its relation with hemoglobin A1c levels in 80 Indian patients with type 2 diabetes. Undoubtedly, *H. pylori* plays a critical role in the development of various gastroduodenal disorders; while, only a small fraction of infected individuals develop to severe diseases. After glorious discovery of this bacterium by Marshall and Warren in 1983, a large variety of diseases had been listed to be affected by *H. pylori* infection.^[2] Type 2 diabetes is the most common type of diabetes worldwide, and a lot of adults (older than 40) are suffering in developed and developing countries.^[3] Insulin resistance disclosed by human cells can be the major cause of type 2 diabetes. However, genetic susceptibility, diet and lack of enough exercise can be in the rest of list for risk factors. Despite the small sample size of the study ($n = 80$), any new fact about *H. pylori* as one of the most complicated infection calls for actual biologic explanations. In this study, authors did not provide any explanation about their findings. As such, small sample size can be the likely, reason for this conclusion. Moreover, it can be speculated that association of type 2 diabetes and *H. pylori* infection is coincidental, though it

may be valuable, if authors retest their findings among the different populations, and then draw a direct conclusion. Interestingly, in India due to the hygiene conditions, people will get infected by the bacterium when they are <10, and that is why such association with particular diseases (type 2 diabetes; which is relevant for one older than 45) seems a bit away of current knowledge. Therefore, more solid findings from various groups are warranted before, we take a step forward to address *H. pylori* as risk factor for type 2 diabetes.

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