

Letter to the Editor

## *Helicobacter pylori* infection, chronic kidney disease, and peptic ulcer disease



Dear Editor,

The recent publication of “*Helicobacter pylori* infection rate in chronic kidney disease and end-stage renal disease patients with peptic ulcer disease” is very interesting.<sup>1</sup> Chang and Hu<sup>1</sup> noted that “the *H. pylori* infection rate is lower in PUD patients with CKD and ESRD than in those without CKD.” There are many concerns regarding this report. First, the prevalence of peptic ulcer disease (PUD) in chronic kidney disease (CKD) in the previous report is very high and there are several risks including “hemodialysis therapy, patient status (inpatient vs. outpatient), and ulcerogenic medications.”<sup>2</sup> Given that the present report by Chang and Hu<sup>1</sup> is a retrospective study, determining the effect of those confounding factors might not be possible. Second, the diagnostic properties of the laboratory tool used for diagnosis of the *H. pylori* infection in the case with renal failure should be discussed. In a previous report by Rowe et al.,<sup>3</sup> it was noted that different laboratory tools have different diagnostic properties, especially in terms of false positives and false negatives. Neithercut et al.<sup>4</sup> also noted that “the urea:ammonium ratio proved to be nearly as effective in identifying the presence of *H. pylori* infection in subjects with chronic renal failure as it had in subjects with normal renal function” (nearly as effective—false positives can still be seen in the study).

References

1. Chang SS, Hu HY. Lower *Helicobacter pylori* infection rate in chronic kidney disease and end-stage renal disease patients with peptic ulcer disease. *J Chin Med Assoc* 2014;**77**:354–9.
2. Liang CC, Muo CH, Wang IK, Chang CT, Chou CY, Liu JH, et al. Peptic ulcer disease risk in chronic kidney disease: ten-year incidence, ulcer location, and ulcerogenic effect of medications. *PLoS One* 2014;**9**:e87952.
3. Rowe PA, el Nujumi AM, Williams C, Dahill S, Briggs JD, McColl KE. The diagnosis of *Helicobacter pylori* infection in uremic patients. *Am J Kidney Dis* 1992;**20**:574–9.
4. Neithercut WD, Rowe PA, el Nujumi AM, Dahill S, McColl KE. Effect of *Helicobacter pylori* infection on intragastric urea and ammonium concentrations in patients with chronic renal failure. *J Clin Pathol* 1993;**46**:544–7.

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