Reviewer’s report

Title: The value of serum pepsinogen levels for the diagnosis of gastric diseases in Chinese Han people in midsouth China

Version: 2 Date: 6 December 2013

Reviewer: Nayoung Kim

Reviewer’s report:

Thanks for your kind answer to my comments. I have more comment as follow;

Major comments:
1. As I commented previously, serum pepsinogen levels are affected by many factors such as age, gender and so on. I understand the author’s opinion that due to the small sample size, the authors could not analyzed the other factors. If so, how about adding mean ages and gender distribution of non-GC group, GC group and healthy control group in tables? How about adding correlation (correlation coefficient) between pepsinogen values and age?

2. The statistical methods are incorrect.
   1) The author said “analyze the differences in patients with gastric disease and healthy controls by using paired t-test” Paired t-test is estimating the difference between two matched population means. In this case, Student’s t-test is correct method.
   2) In statistical method section, “P < 0.05 was considered statistically significant” and “two-sided P value of less than 0.05 was considered statistically significant” are overlapping sentences.
   3) In statistical method section, the authors said “continuous variables were shown as mean ± SD and non-normal distribution variables were shown as median and interval.” However, in table 1, all values are presented as mean ± SD. Which one is non-parametric data?
   3. In page 7, “As shown in Table 5, serum PG I level in the patients with gastric ulcer and those with duodenal ulcer were 147.58 ± 57.81 µg/L (n = 36) and 217.43 ± 51.12 µg/L (n = 31), respectively, significantly higher than in the subjects with endoscopically normal mucosa (118.39 ± 47.8 µg/L).” This sentence is more related with ‘Table 1.’ And I think ‘Table 5’ is meaningless data because the same result already described in ‘Table 1.’ It would better to delete the ‘Table 5.’

4. In method section, the authors identified the H. pylori status by RUT and anti-H. pylori IgG test. Please clarify the definition of current H. pylori infection. Is the author use both of these methods or one of these method?

Minor comments:
1. In abstract, line 3, serum PG levels instead of serum levels.
2. In introduction, page 4, line 3-4, suggest appropriate references, please.
3. In page 5, line 12, correct P as small letter.
4. Please correct all signs of inequality (#, >) in page 7.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests