

We thank the editors and reviewers for their careful review and valuable suggestions. We have revised our manuscript based on these suggestions. Our point-by-point response is shown below:

### **Answers to reviewer**

*Title: please include region or monocentric study- since the data do not necessarily reflect the data of Japan.*

Reply : As you pointed out, this date don't include all Japanese gastric ulcer bleeding patients. Hence, we changed the title to "Changes of gastric ulcer bleeding in the metropolitan area of Japan. A Retrospective Study."

*Abstract: Key words: may be extended for instance NSAID*

Reply : Thank you for your suggestion. We added "non-steroidal anti-inflammatory drugs" and "anti-thrombotic agents" to key words.

*Abstract: -Please revise the aim. It is not correct to state the trends in Japan as the study was monocentric! The data do not necessarily reflect the status in all Japan (also in the Introduction). Furthermore, if the authors delete the causes and treatment form the aim the sentence would be more attractive. -Simple H. pylori-induced ulcer: please delete simple.*

Reply : As you pointed out, our study reflected the status in the metropolitan area of Japan. Therefore, we changed "We examined trends in the causes and treatments of gastric ulcer bleeding over 10 years in Japan." to "We examined the trends of gastric ulcer bleeding over 10 years in the metropolitan area of Japan . ". We used the word "simple" to emphasize the patients didn't take NSAIDs and anti-thrombotic agents. However, we agree that the word will be hard to understand as you mentioned. Hence, we deleted 'simple'.

*-Results needs polishing: unfortunately the first two sentences can be expended by the following sentences without losing the message and creating more space for other optimization. -Abbreviations in abstract are not introduced und should be avoided*

Reply : In this study, we examined the trends of *H. pylori* infection rate and administration rate of ulcerogenic medicines. First, we examined is there trend between these factors and time. Then, we examined between these factors and aging. We wrote all these result in abstract. You indicated it was confused, so I delete some sentence.

Concerning abbreviations, we revised the abstract according to the guidelines, correctly.

*-Conclusion first sentence is not fully correct as the results show a trend only and maybe rephrased to overall a changing trend!*

Reply : Thank you for your comment and we agree with it. Thus, we changed the conclusion as follows;

“The trends, that the gastric ulcers caused by ulcerogenic drugs were increasing with age and *H. pylori*-induced ulcers are more common in younger patients, were observed.”

*Paper:*

*-Introduction, please specify the rates in H.pylori reduction in Japan from to: would be helpful for the readers to compare.*

Reply : Thank you for your advice. We specified the accurate rates in the sentence in the Introduction as below.

“The rate of *H. pylori* infection in Japan has fallen over the last decade, from 74.7% (1970s) to 53.0% (1990s) and 35.1% (2010s), mainly due to spreading of *H. pylori* eradication therapy and improved hygiene [4].”

*-Methods: I would expect much larger number of patients from a tertiary center in Japan over the period of 10 Years (50 Patients a year). Why is there only 564 Patients. What was the selection process? How many patients were excluded?*

Reply : Thank you for your comment. We understand your opinion that there would be more gastric ulcer patients in a tertiary center in Tokyo, Japan.

As we mentioned in the Methods, the outpatients, who diagnosed as a gastric ulcer, were not included in this study. This time, we picked up the enrolled patients from the database of the inpatients in our hospital. The number of the overall patients of gastric ulcer including outpatients, was not available for this reason. We expect that development of PPIs/P-CAB could prevent admission of gastric ulcer patients.

*-Methods: I am strongly missing the Forrest classification for the Ulcer bleeding. As this is a key information in characterization of rebleeding I would strongly recommend to include this information in the revised version.*

Reply : Thank you for your comments. As you said, Forrest classification is useful for predict the risk of re-bleeding. We added information of Forrest classification. As described in the Table and the Result, the total rate of Forrest I a, I b and II a patients was not significantly different in the first half and the second half (63.7% vs 58.6%,  $P=0.24$ ). This result showed that the decreased rate of re-bleeding in the second half was not caused by the changes of the distribution in Forrest classification. However, this result support the hypothesis that the decreased rate of re-bleeding in the second half may reflect the changes of the treatments. Sentences describing these findings have been added to the Discussion section.

*-Results: the Figure 2 is kind of unclear- does the date refer to the prior treatment? If yes, please revise the legends and descriptions*

Reply : Yes, Figure 2 shows the rate of antacid administration prior treatment. To clarify it, we revise the legends as below.

“Rate of antacid administration prior treatment (histamine type 2 receptor blockers and proton pump inhibitors) prior treatment.”

*-Results: the number of patients in Figure 4 is relative. It would be great if an absolute number to the methods of treatment would be included as well. Overall, the absolute number of patients at different years 2006-2016 is not visible.*

Reply : Thank you for your comment. The number of gastric ulcer bleeding patients was decreasing as time passed. We agree that adding the graph of the absolute number is a good idea, therefore we added the graphs. It will make easily to understand the overtime-trend.

*-Results: information to the previous Ulcer bleeding would furthermore make the paper very strong as many patients with ulcer recurrence may potentially did not receive appropriate prevention or treatment (H.pylori eradication).*

Reply : Thank you for your important suggestion. We agree that the patients who had past history of gastric ulcer but didn't receive appropriate prevention or treatment have high risk of recurrence. Because this study is a retrospective chart review, it is difficult to collect exact data whether they were treated or not in the other hospitals before they admitted to our hospital. Thus, we added the following sentence in the limitation.

"The information of the previous ulcer bleeding was not available."

*-Results and discussion: increasing age reflect the current aging population in Japan. This may probably be highlighted.*

Reply: Thank you for your comment. We absolutely agree with your assessment. Recently in Japan, population is aging rapidly. In our study, the mean age of gastric ulcer patients increased and it had significant over time trend. As you mentioned, there may be relationship between them, so I emphasize it in the conclusion as follows .

"In conclusion, the mean age of patients with gastric ulcer is increasing, which probably reflect the current aging population in Japan."