Reviewer's report

Title: Type V pit pattern: Impact of clinical experience and magnifying chromoendoscopy

Version: 3
Date: 25 February 2014
Reviewer: SHiro Oka

Reviewer's report:

Comments to authors (Major Revision)

The authors presented the reliability of type V pit pattern for early colorectal cancer to diagnose invasion depth of SM 1000µm. The collected experience is interesting. However, there are some problems with the current study that need to be addressed. My suggestions are as follows:

Major comments

1. This study design has a bias of conventional image to diagnose the invasion depth using magnifying chromoendoscopy image, especially in the experienced endoscopists. To assess the reliability of type V pit pattern, it is better to evaluate by magnifying chromoendoscopy image alone.

2. In the selected lesions, are there any LST lesions? Especially, LST-NG pseudodepressed type (0-IIa+IIc) with type VI pit pattern (mild irregular) has a possibility of SM deep invasion. The authors should describe this point.

3. In this study, did the endoscopists regard type VI pit pattern (severe irregular) as the confirmation of SM deep invasion in all cases? It is important how to evaluate the lesions with type VI pit pattern (severe irregular), because they have SM scanty invasion or intramucosal cancer in some cases.

4. The kappa value for intra-observer agreement of type VI pit pattern subclassication was relatively low. The authors discuss the reason more in the Discussion.

5. How about the kappa value for intra-observer agreement of type Vn pit pattern? The authors should mention the results about this point.

6. How was the mean value of the SM invasion depth in the lesions deeper than 1,000µm? The interpretation is greatly different in the lesions that exceed 1000µm a little or a lot.

7. The only 1 moderately differentiated adenocarcinoma should be excluded in this study, because the pit pattern of the moderately differentiated adenocarcinoma often looks worse compared with that of well differentiated adenocarcinoma.

8. In the Table 3, what is a concrete numerical value of the SM depth in the SM-d
lesions?

9. In the Figure1, I recommend that the authors should change a more typical picture of Vn pit pattern, because the distinction between non-structure and mucus is difficult in this case.

10. The number of references about the clinical usefulness of pit pattern diagnosis for the colorectal lesions is relatively small. I recommended that more references should be cited.

11. The authors had better confirm the statistical method. Mann-Whitney U test seem to be unsuitable to analyze between 3 groups.

Minor comment
1. P6 line 5. subcategories # subcategories
2. P6 line 7. colorectal cancers # early colorectal cancers
3. Figure2. Please describe the group (I, II or III) clearly in the figure

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

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.