Reviewer’s report

Title: Colorectal endoscopic mucosal resection with submucosal injection of epinephrine versus hypertonic saline in patients taking antithrombotic agents: propensity-score-matching analysis

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Reviewer: Li-Chun Chang

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Yamaguchi et al. conducted this retrospective study to compare the risk of bleeding between using epinephrine and hypertonic saline for submucosal injection. Their study disclosed that the risk of immediate bleeding and post-EMR bleeding was not different between injection with epinephrine and hypertonic saline in subjects with an antithrombotic agent. This is a well-written paper. Although a significant difference developed in many important variates between two groups, this was minimized by propensity score. However, the weakness is the prospective design. Too many confounders will influence the result even after adjustment. The followings are my comments:

1. Comorbidity has a massive impact on the risk of bleeding. A comprehensive evaluation of comorbidity, such as using Charlson comorbidity score, will minimize this confounder.

2. Is there any rule to decide which injection solution to use in the endoscopy unit? For neoplasm with a higher risk of bleeding, the endoscopists may prefer one epinephrine for submucosal injection. This may lead to bias.

3. I am curious about the reason why prophylactic clipping was performed in every EMR.

Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?  
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Yes

Are the conclusions drawn adequately supported by the data shown?  
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Yes

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I am able to assess the statistics

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