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Editor in Chief

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Dear Editor,

We would like to thank you and the reviewers for the meticulous and constructive feedback on our manuscript.

We would like to respond to the queries from the reviewers as the followings:

Reviewer #1

- 1) adding the percentages of post-colonoscopy diverticulitis in the results section, together with the description of the statistical method used for calculations (rough calculations from Table 1: 0.03-0.2% - is that correct?)
 - The estimated incidence of post-colonoscopy diverticulitis was 1.3% from this review. This figure has been estimated from the one prospective and four retrospective studies.
- 2) adding a spectrum of symptoms with the percentage in the results section
 - Unfortunately, the majority of studies did not specify the percentage of the symptoms except the 4 case reports.
- 3) transferring of Prisma flowchart to materials and methods.
 - The PRISMA flowchart has been moved to the section of materials and methods.
- 4) on what basis did the authors decide that the cut-off point for a complication of diverticulitis should be 72 hours? Do they have a graph with the number of diverticulitis cases after the colonoscopy culminating 72 hours before? If so - please add the figure. If not, please explain in detail the choice.
 - The proposed definition for post-colonoscopy diverticulitis was based on the

literature on post-colonoscopy appendicitis where it is believed to have the same mechanism of pathogenesis. Anything beyond 72 hours could well represent a *de novo* episode. This has been added to the discussion.

- Majority of the cases of post-colonoscopy diverticulitis were reported from the larger series and the exact number of cases to the diagnosis prior to 72 hours is unknown.

5) was it known how many subjects had diverticula found before index colonoscopy and whether they had had diverticulitis before?

- This would be an extremely important information to include. However, the number of patients with previous history of diverticulosis or diverticulitis was unknown. This has been added to the discussion.

6) was the percentage of inflammations lower when the indication was screening?

- The studies did not provide a breakdown of the post-colonoscopy diverticulitis when colonoscopy was either done for screening, diagnostic, or surveillance.

7) according to the current knowledge, the lifetime risk of diverticulitis is between 1 and 8.5%, depending on the population and the diagnostic method used.

Thank you for the additional information. In our discussion section, there was the statement of "Taking into consideration the lifetime risk of diverticulitis in a person is approximately 10-25% [20], a substantial number of the population will likely undergo a colonoscopic follow-up."

Reviewer #2

The authors conducted a systemic review of diverticulitis after colonoscopy as its complication. There are two unclear points.

First, what was the problem of diverticulitis after colonoscopy? Diverticulitis is not desirable as a complication of colonoscopy. But the disease is common disease, and usually not so hard to cure. Were there any differences between diverticulitis after colonoscopy and without colonoscopy?

- We agree with that majority of the cases of diverticulitis that present are

uncomplicated and resolve with non-operatively management. However, given the estimated incidence of 1.3% of post-colonoscopy diverticulitis from this review, this has significant implications. The number of colonoscopies performed worldwide is increasing exponentially for screening, diagnostics, and surveillance. Therefore, this entity is likely to increase simultaneously, leading to representations and re-admissions to the hospital. This will add further burden to the healthcare system. By understanding its potential causes, it is hoped that this complication can be prevented.

- There are currently no studies that have evaluated the difference in incidence of diverticulitis before and after colonoscopy.

Second, how was the definition of the diverticulitis after colonoscopy? The authors tentatively defined it as occurrence before 30 days after colonoscopy referring from the literatures. It was not clear why “30 days”. How would the authors think about this point? How do the other literatures define the diverticulitis after colonoscopy? Discussion was relatively long. It should focus on the significance of the study.

- There currently no available definition of “post-colonoscopy diverticulitis” in the literature.
- We defined the proposed timeframe as within 72 hours post-colonoscopy based on the previous definition of post-colonoscopy appendicitis which is believed to share similar mechanism of pathogenesis. This has been included in the discussion.
- Therefore, in the discussion section, we discussed about the limitations of this review where some studies included the timeframe up to 30 days.
- We have also revised the discussion part to focus on the significance of the study.

We await to hear from you.

Kind regards,

ZN