

Format for ANSWERING REVIEWERS

August 25, 2012

Dear Editor,



Please find enclosed the edited manuscript in Word format (file name: 2227-review.doc).

Title: Protective effect of naringenin on acetic acid-induced ulcerative colitis in rats

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The manuscript has been improved according to the suggestions of reviewers:

(1) Format has been updated

(2) Revision has been made according to the suggestions of the reviewer

Reviewer (1)

1. Doses were fixed according the ED50 of NG from the literature, the references are fixed.
2. Before the main study starts, pilot studies were done to establish the induction of ulcerative colitis. The reproducibility of the results may be established with different biomarkers. In present study, oxidative enzymatic activities and pro-inflammatory cytokines were estimated. The NG showed protection in both mechanism of action so our results justified reproducibility.
3. In Figure 2, arrows showed the visible changes and that decreased in legends.
4. Hypothesis of the present study is to evaluate the effect of NG on experimentally-induced ulcerative colitis via its antioxidant and anti-inflammatory role of action.
5. Amaro et al., (2009) have used different model with single dose and also estimated only one parameter of oxidative stress marker (malondialdehyde) in colitis tissue. The present study has completed by taking three doses with a standard drug for comparison the effect of NG. Furthermore, the potential effect of NG against ulcerative colitis was explored with different mechanism of action and finally the results were compared and justified with histopathological evaluation. We concluded that, phenolic compound like NG content natural products can be used as dietary supplements for prevention of inflammatory bowel disease.

Reviewer (2)

1. The hypothesis of the present study is to evaluate the effect of NG on acetic acid-induced ulcerative colitis by regulating antioxidant and inflammatory mediators. The experimental model has used from the literature by following little modified treatment procedures. Similar treatment procedures have been adapted in earlier experimental studies, reference has added in method section.

2. The method used for inducing ulceration in colon and the drug effect evaluating procedure by following 24 h was used from the literature and the reference has added in methods section.
3. Whole study was completed in one set of experiment by using 42 male albino Wistar rats and that has mentioned in methods. After the reviewer comments we were gone through one more set of experiment taking exactly same conditions, here we have taken the photographs of colon ulcerative induction and protection. Furthermore, we have estimated nitric oxide (NO) levels in colon tissue to confirm the inflammatory process and its protection in colon tissue.
4. Microscopic scoring of histopathological changes was showed in Table 1. It is clearly demonstrated the changed-induced in colon tissue following AA administration including ulceration, hyperemia, necrosis edema, cellular infiltrate and goblet cell hyperplasia.
5. The grapefruit is removed from introduction section.

Reviewer (3)

Major comments

1. Till date naringenin (NG) has not been evaluated against acetic acid-induced ulcerations in rat's colon model. Although, most of the phenolic compounds have similar characteristics and have similar potential effect against several physiological disorders, the experimental studies are required to find their individual properties and such reports are more important for further investigations and for its therapeutical usage. The discussion has revised by correlating reported potential effects of NG with our results.
2. Present study was designed by following earlier such experiments used to evaluate the drugs effect on acute ulcerative colitis model rodents.
3. The discussion section has shortened and revised.

Minor comments:

1. Those authors were removed.
2. The minor mistakes in writing were removed.
3. In abstract the said rules followed for presenting the data
4. The abstract section has shortened
5. Typing mistake was corrected in DNA and RNA units
6. Acetic acid colitis replaced with ulcerative colitis
7. The CAT method has checked and revised
8. Quercetin has replaced with quercitrin

(3) References and typesetting were corrected

Thank you again for publishing our manuscript in the World Journal of Gastroenterology.

Sincerely yours,

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