

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

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Title: New approach of medicinal herbs and sulfasalazine mixture on ulcerative colitis induced by dextran sodium sulfate

Reviewer's code: 03976790

Position: Editorial Board

Academic degree: DSc, PhD

Professional title: Emeritus Professor

Reviewer's Country/Territory: France

Author's Country/Territory: South Korea

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Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Comments on the manuscript : “New approach of medicinal herbs and sulfasalazine mixture on ulcerative colitis induced by DSS” Inflammatory bowel disease (IBD) has emerged as a major public health problem worldwide. Treatment with commonly used medications such as sulfasalazine revealed a number of side effects. Several mixtures of herbal medicines have been screened as candidates for alleviating these disorders. In this study, the authors compared the anti-inflammatory action of sulfasalazine alone or in combination with herbal medicine for ulcerative colitis in mouse in which colitis was induced with dextran sodium sulfate (DSS). For that, they studied several parameters (ROS serum, anatomy and histology of the colon, expression of several proteins, and especially apoptotic and anti-apoptotic) in normal mice, mice with induced colitis, mice treated with sulfasalazine alone and in combination with Bupleuri radix and Citri unshiu pericarpium mixture. The work is useful with several experiments and a lot of results. Nevertheless, I think this manuscript needs to be improved before to consider it to be published. Minor : Line 139 : write “Ethanol” instead “EtOH” RESULTS : SCPB attenuated the progression of DSS-induced colitis in mice Line 223 : the authors wrote about the “histologic alterations”. Specify what were the main histological characteristics observed in DSS-induced colitis mice and in mice treated according to the treatment. SCPB inhibited apoptosis in DSS-induced colitis mice Line 274 : The authors wrote : “The DSS control group showed the disease-characteristic apoptosis features of inflamed colon epithelial cells, supported by an observable increase in Bax and caspase-3 activities (Figure 6).” Nothing is written about Bcl2. It seems there are no effects on this anti-apoptotic protein. Please, specify this point. DISCUSSION Line 300 : The authors wrote : “the DSS-induced mice showed significantly decreased final body weight and both the sulfasalazine and SCPB treatments curtailed the body weight loss and the

shortening of the colon length. " In the results, there were no statistically significant results about this last point. Line 355 : "and suppression of anti-apoptotic proteins, namely Bcl-2,...".I did not see any suppression of this protein, and in the results, I haven't seen anything about it. This point deserves to be shown in the results and discussed in the discussion. Line 361 : There is no mention of the schematic hypothesis in Figure 7. Present this hypothesis here. FIGURES Figure 1 : A : specify the time between the two measurements; B : Specify here what are the "vehicles", 30 sulfa, 60 sulfa, SCPB, as in the other figures (you have to wait for Figure 2 to have the explanations)) ; C : To specify the main characteristics of the histological sections: what were the notable differences between the different treatments. Figure 2 : A : Specify the unit of measurement; B : specify what is the first figure (Western Blot, I guess?) and the others (quantification). Figure 6, line 758 : Bax instead Bsc? Figure 7 : I did not find the call of this figure in the text. The possible mechanism needs to be emphasized in the conclusion such as an hypothesis.