

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 35136

Title: Fecal microbiota transplantation prevents Hepatic Encephalopathy in Rat with Carbon Tetrachloride-Induced Acute Hepatic Dysfunction

Reviewer's code: 00182114

Reviewer's country: Japan

Science editor: Ya-Juan Ma

Date sent for review: 2017-07-13

Date reviewed: 2017-07-15

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input checked="" type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

Dear author This is very interesting paper about fecal microbiota transplantation (FMT) for hepatic encephalopathy (HE). According to your paper, EMT is good effect for intestinal barrier function and especially tight junction protein (claudin-1, claudin-6 and Occludin). Thereafter, EMT is protective role in treating HE. I ask some questions. 1. Please comment me the reason why in Fig 6 blood samples were collected from portal vein and tail vein. Please comment the significance of portal blood and peripheral blood level in ammonia, cytokine. 2. Please comment the reason why the ammonia level in EMT is similar to control. 3. According to your data, intestinal barrier function and tight junction are important factor to ammonia level. Please comment me the etiology between ammonia level and intestinal barrier function.

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Name of journal: World Journal of Gastroenterology

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Title: Fecal microbiota transplantation prevents Hepatic Encephalopathy in Rat with Carbon Tetrachloride-Induced Acute Hepatic Dysfunction

Reviewer's code: 01808881

Reviewer's country: United States

Science editor: Ya-Juan Ma

Date sent for review: 2017-07-03

Date reviewed: 2017-07-16

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good		<input type="checkbox"/> Duplicate publication	
<input type="checkbox"/> Grade D: Fair	<input checked="" type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Minor revision
	<input type="checkbox"/> Grade D: Rejected	BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

35136 Fecal Microbiota Transplantation Prevents Hepatic Encephalopathy in Rats with Carbon Tetrachloride-induced Acute Hepatic Dysfunction This study was conducted to understand the effect of FMT on HE using an in vivo rat Hepatic Encephalopathy model. This is an interesting manuscript with clear rationale and hypothesis. Appropriated methods and techniques have been employed. The authors have discussed their findings. However, a few concerns were noted 1. Some methodology sections are not explained. 2. Please explain whether CCl₄ treatment was continued during ethanol feeding. This aspect is unclear 3. The method for FMT should be described. How was it done? Secondly, better explanation is warranted for VSL treatment? The authors state, it was given by intestinal tube. Is that gavaging? 4. Will this publication be printed in color? If not, there should be some patterns on the columns such that a reader can understand in black and white reprints. 5. It appears that VSL

was superior to FMT in almost all outcomes. This aspect is not discussed adequately. Why not use VSL? Why do the authors think that FMT is better? 6. The authors have shown improvement in inflammatory markers and intestinal permeability as the mechanism by which FMT prevents HE. The authors should discuss how alterations in microbiota affects ammonia production. Is it through improving liver's function or it that more ammonia producing bacteria are present in their experimental model of HE and FMT is reducing that? 7. Even though the authors have included a certificate of language, there are many sentences that need to be reworded. An example - first two sentences in "Scientific research process" section. The entire section is very poorly written. 8. Histology pictures should be bigger resolution with arrows marking their findings.