

## Format for ANSWERING REVIEWERS

June 11, 2014



Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 10097-review.doc).

**Title:** Effect of an Intra-arterial Infusion with Triolein Emulsion on Rabbit Liver

**Author:** Yong-Woo Kim, Sik Yoon, Hak Jin Kim, Do Yoon Park, Byung Mann Cho, Seon Hee Choi ,  
Young Mi Park

**Name of Journal:** *World Journal of Gastroenterology*

**ESPS Manuscript NO:** 10097

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

(1) Reviewer A (00503530)

Is it a purpose to use treatment of the liver cancer for with a triolein emulsion? I do not understand the present conditions of the triolein emulsion well from an article. There seems to be little influence on liver. I am distributed, and how is the triolein emulsion excreted by the body? Please add a postscript.

Reply: It is not purpose to use triolein emulsion for treatment of liver cancer.

Triolein emulsion increases vascular permeability in the barriered blood vessels in the brain, testis and retina transiently without significant histopathologic change when it is infused into the arteries. Intra-arterial infusion of a triolein emulsion in the skeletal muscles, having continuous capillaries but no blood-organ barrier, also increases vascular permeability without significant histologic changes.

Triolein emulsion may be used as an adjunctive drug for chemotherapy. It is thought that if a drug is infused after a triolein emulsion injection, the therapeutic effect can be achieved with a small amount, but can also be enhanced in the case of a drug with a little therapeutic effect. For clinical use as an adjunctive drug for chemotherapy, however, it is necessary to study the histologic or functional changes in the other body organs into which triolein are injected. The effect of triolein emulsion on fenestral capillaries has not been reported. As there is no barrier around fenestral capillaries, especially sinusoidal capillaries in the liver, it is expected that the triolein-induced vascular change is different from those of continuous capillaries in the brain or eyeball.

# I am distributed, and how is the triolein emulsion excreted by the body? Please add a postscript.

We add a postscript into discussion like below.

"Triolein emulsion is a kind of fat emboli. Fat emboli differ from most other emboli in that they are fluid and deformable and can penetrate capillaries. Fat Emboli break up into smaller globules as they penetrate capillaries. After a temporary hold-up in systemic capillaries, the emboli pass into veins and

return to the lung. The cycle is repeated again and again, and thereby the globules become smaller and smaller until they are no longer embolic. When they approach micron size, they are readily removed from the blood by phagocytic systems in the liver and elsewhere."

(2) Reviewer B (00069340)

This manuscript investigated the effect of intra-arterial infusion with triolein emulsion (TE) on rabbit liver. The authors showed that infusion of TE into the rabbit livers manifested a minimal transient effect on the levels of ALT and AST, but no significant effect on liver histology. These result, although primarily descriptive, may provide preliminary basis for further studies regarding the intra-arterial infusion of TE. The English of the manuscript needs careful editing, such as: ABSTRACT There many abbreviations such as "HA", "NS", "LFT" ...need to be defined. Introduction "type I" or "type 1"? ....

Reply: The English of the manuscript was edited carefully.

Abstract - delete many abbreviations and use full name.

Introduction - " type I" is correct. type 1 is mistyping. We change the "type1" as type I.

(3) Reviewer C (00068912)

The manuscript Hak Jin Kim et al. titled "Effect of an Intra-arterial Infusion with Triolein Emulsion on Rabbit Liver" devoted studying of the mechanisms of changes arising in the liver on intra-arterial infusion of triolein emulsion by rabbits. To assess this impact was using biochemical and histologic methods. The authors showed that infusion of triolein emulsion into the rabbit livers manifested a minimal transient decrease level of ALT and AST and the absence of specific histological changes in the liver. The Title is accurately reflects the content of the article. The abstract gives a clear delineation of the aim, materials and methods, results and conclusion. Abbreviations such as "HA", "NS", "LFT" in the abstract must be decrypted. The purpose of the study may not be devoted to the study of the "...biochemical and histopathologic effect on rabbit liver". It is necessary to more clearly formulate the aim of the research. The results are written in accordance with journal requirements. Tables and figures present the study results. The discussion is well organized for the international journal such level as WJG.

Reply: We decrypted abbreviation in the abstract into full name.

We added two sentences in introduction and formulate the aim of the research more clearly.

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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