

Feb,15,2014

Dear Editor,

Please find enclosed the edited manuscript in Word format

**Title: Resistin is not an appropriate biochemical marker to predict severity of acute pancreatitis: A Case-Controlled study**

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

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

**Reviewer 1 (02861598):**

- 1) Methods: "In cases of recurrent pancreatitis, ERCP was done to demonstrate.....(page 4, last para)- How many patients had recurrent pancreatitis and what were their ERCP findings? (did any patient had chronic pancreatitis on ERCP?)
  - *Patients with a history of recurrent pancreatitis (n=23) were excluded. Thirteen of these, had metabolic , hyperlipidemia and hypercalcemia recurrent pancreatitis, whereas ten had recurrent pancreatitis without an identifying underlying cause. Ten patients underwent ERCP and three of them had two separately draining pancreatic ducts (pancreatic divisum). Thus, two patients had chronic pancreatitis on ERCP by presence of pancreatic duct stones.*
- 2) Who comprised the 'control' group in the study- were these healthy volunteers?? Please explain.
  - *The control group consisted of healthy subjects without hyperlipidemia or diabetes mellitus. BMI was also matched because it has been reported that serum resistin increases in obesity and insulin resistance.*
- 3) Results: The information provided in Table-1 is repeated in results. This redundant information should be removed.
  - *We apologize for this oversight and have removed the repeated information.*

4) 'Discussion' is lengthy and not focused to the findings of the study. One is lost in the details written on the severity of pancreatitis and markers of severity. I would suggest that authors should begin discussion with the findings of their own study and discuss it in relevance to the available literature.

- *We have rephrased and shortened the Discussion section as per your recommendation.*

5) Table-1: Providing values of 'Means with SD' would be sufficient. I would suggest removing other values like median, range, etc. - Authors have included only 102 patients in this study, then why are additional 23 patients with idiopathic pancreatitis included in Table-1 (Etiology). - Please remove mortality data in table as it is already mentioned in the text in 'Results' section.

- *We removed the median-range values for Table 1, and have also removed information for the 23 patients who were excluded due to recurrent pancreatitis.*

- *We kept mortality data in the table 1 and we removed this data from the text.*

6) Table-2: I would suggest providing percentages of patients with acute and chronic pancreatitis instead of % age for total number of patients.

- *We agree with the suggestion and have added the percentages to Table 2.*

7) Table-3 is very confusing. It is not clear what is analyzed here. I could not understand the meaning of 'Resistin-C'. Caption says "relationship between plasma markers for all pancreatitis"???? If Resistin-C is resistin levels in controls, then, the relationship of resistin levels in patients and controls can be explained in one sentence in the main text. There is no need for a separate table with mean, media, range, etc. for analyzing this parameter.

- *We apologize for the confusing nature of Table 3 and have removed it from the manuscript.*

*This information is sufficiently explained in the text and when referring to Figure 1.*

8) The information given in figures 1 and 2 is same as in tables 3 and 4. This is redundant information. Author should decide if they want to provide this information in table or figure but not both.

- *We agree with the reviewer and have removed both Tables 3 and 4 (also see response to #7 above).*

9) There are numerous grammatical errors throughout the manuscript. Authors should obtain help from someone who is proficient in English while revising the manuscript.

- *We have obtained further guidance regarding grammar and have updated the manuscript accordingly.*

#### **Reviewer 2: (02510223)**

1) In this paper, the authors concluded that resistin was not a good biochemical marker in predicting acute pancreatitis severity, which was the opposite of the previous studies. The authors themselves even quoted those studies but no discussion was made between the different views. This discussion is crucially important and it's the key to this work. More authors' own opinion about the controversial points should be given in this portion.

- *We discussed our negative results and we compared the other studies. We added our opinion in this controversial issue*

2) This manuscript contains too many obvious errors in punctuation, 2-We corrected the grammatical and punctuation errors

- *We have obtained further guidance regarding grammar and punctuation and have updated the manuscript accordingly.*

- 3) Please provide a clear picture with larger image version in Figure 4.  
- *We replaced Figure 4 with a larger image and have changed it to become Figure 3.*

**Reviewer 3: (00001390)**

- 1) Total patients number was 125, not 102 shown in results?  
- *We apologize for the confusion. Initially, 125 patients were recruited for the study, but 23 were excluded due to recurrent pancreatitis, leaving 102 to complete the study.*
- 2) What the difference of resistin A and B?  
- *Resistin A refers to serum resistin levels upon patient admission. Resistin B refers to serum resistin levels 48 hours after hospital admission. However, in our study, we determined only the "A" value to be a valuable tool for detecting severity earlier.*
- 3) Most patients were acute gallbladder stone-induced pancreatitis. However, major cause of acute pancreatitis in other countries may be considered to be alcohol. I consider that it is better for resistin to be evaluated also in alcoholic patients. Were there few alcoholics in your country?  
- *The reviewer brings up an important point. Although we agree that it would be valuable to study resistin levels in alcohol pancreatitis patients, in Saudi Arabia, especially in the province where the study was administered, no one or few consumed alcohol. Thus, most of our patients exhibited biliary pancreatitis.*
- 4) How about the correlation between serum resistin level and severity evaluated by Ranson and APACHE II scores?  
- *We agree with the reviewer that this is an important comparison, however, when we tested the relationship between serum resistin levels and severity by Ranson and APACHEII scores, we did not find a significant relationship ( $p$  value = 0.719).*
- 5) How about the correlation between serum resistin level and the extent of fat necrosis that is evaluated by image analysis of CT?  
- *We did evaluate the relation between resistin level and the extent of fat necrosis by CT scan, however, there was not a significant difference ( $p$  value = 0.431).*
- 6) I consider that hypocalcemia represents the severity of fat necrosis, because degradation of triglyceride which occurs in fat necrosis consumes serum calcium to form a soap with a fatty acid. How about the correlation between serum resistin level and calcium?  
- *We agree that this is an interesting question, however, there was no correlation between serum resistin and calcium level ( $p$  value = 0.271).*
- 7) Most part of discussion in this manuscript should be stated in Introduction. In discussion, authors should discuss the results of this study, such as inability of resistin to predict the severity of acute pancreatitis.  
- *We have adjusted the Introduction and Discussion sections accordingly.*

Thanks

Dr.Samer Sawalhi