Reviewer’s report

Title: Effect of oral administration of ethanolic extract of Vitex negundo on thioacetamide-induced nephrotoxicity in rats

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Reviewer: Fouad Al-Bayaty

Reviewer’s report:

Comments to the Authors

The manuscript written by Farkaad A. Kadir et al. indicated the effect of oral administration of ethanolic extract of Vitex negundo on thioacetamide-induced nephrotoxicity in rats for the protective effects of the leaves of Vitex negundo (VN) extract against TAA-induced nephrotoxicity in rats is really important area of research. However, the submitted manuscript itself needs minor essential revisions before its acceptance.

Title: Effect of oral administration of ethanolic extract of Vitex negundo on thioacetamide-induced nephrotoxicity in rats

Comments

1. Introduction

Authors want to indicate the effect of Vitex negundo on kidney disease? - Then, authors need to discuss more about the effect of this plant extracts in the biological points of view.

2. Materials and methods

Page 5

• Please include the number of Voucher specimen

Page 6

• How much the % yield of plant extract

• The author used two dosages (100 mg/kg and 300 mg/kg). What are the rationales of using these two dosages?

• The authors mention: 30 mg pure TAA which is in crystal form in 100 ml distilled water (0.03% w/v) until all the crystals were dissolved. The solution was given to the rats as their daily drinking water

• Can you estimate the amount of TTA taken by the rat daily, I believe this will strengthen (the amount consumed per day) yours results and gives evidence about the effect of the plant.

• Animals prepared by the National Academy of Sciences and outlined in the
“Guide for the Care and Use of laboratory Animals” were complied. Please add reference
Page 7
• The kidneys were excised into two halves. One half was kept in isotonic formalin for determination of histopathological assessment and the other half was kept in freezer under -80 °C until processed for detection of MDA, CAT and SOD assays.
Page 8
• Kidney samples were dissected and washed immediately with ice cold saline to clean. Kidney homogenates (10 % w/v) were prepared by homogenizing kidney tissue.
• Why both statements are different? Please explain why you used different approach.

Page 9
• v. For immunohistochemical examination, 4µm-thick paraffin-embedded tissues were deparaffinized and blocked for endogenous peroxidases and the slides immersed in 0.3% hydrogen peroxide in methanol for 20 min.
• Deparaffinized sections were treated in a microwave oven in the citrate buffer at 95 °C for 15 minutes, and immersed in 3% hydrogen peroxide in methanol for 10 min to abolish endogeneous peroxidase activities.
• Why both statements are different? Please make them clearer why you used different % and time.

3. Results
Page 11
Table 1 should be reconstructed as follow
• Body weight and kidney weight should be arranged in horizontal form, while Normal control, TAA, VN 100 + TAA, and VN300 + TTA should be arranged in vertical column form
• ii. Replace the superscript letters with Asterisk symbol (*)
Page 11 & 12
• iii. Table 2 & 3 do it similar to Table 1
4. Discussion
Page 15
• role in the development of many kidney diseases [4, 31]. The font is not the same
• Authors need to state the limitations of the work in few lines.
Page 20 and 21
• legends of the figures not clear which one fig.1
• Figure with 5 Photomicrographs of renal sections:
  • plz clarify which Ai: Normal control - cortical area, showing normal glomeruli (GL) with intact Bowman’s capsule (BM) and proximal convoluted tubules. Aii: Normal control - Medullary area of the, showing intact collecting ducts.

'I declare that I have no competing interests'

Decision
• Manuscript needs some language corrections before being published
• Accepted after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests