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LETTER

Liquiritin Protects Against Cardiac Fibrosis After Myocardial Fibrosis After Myocardial Infarction by Inhibiting CCL5 Expression and the NF-κB Signaling Pathway [Letter]

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Dear editor

We read with interest the study by Xue Han et al about Liquiritin Protects Against Cardiac Fibrosis After Myocardial Infarction by Inhibiting CCL5 Expression and the NF-κB Signaling Pathway.[1] We congratulate the authors who have made a major contribution to the world of health, especially heart disease. Based on the results obtained in this study the researchers concluded that Liquiritin (LQ) can improve cardiac function, reduce the size of myocardial infarction, attenuate cardiac pathological damage, suppress oxidative stress and inflammatory response, and decrease the expression of biomarkers related to MF. The method used by Xue Han et al in this study is appropriate so that researchers can draw conclusions that Liquiritin (LQ) compounds can significantly reduce oxidative stress and inflammatory responses. We would like to provide input to researchers who wish to carry out the same research regarding LQ compounds to be able to first conduct a toxicity test on each compound from the extract to be tested because this can minimize the side effects of the compound if the test is used excessively.[2]

Xue Han et al in this study gave mice the LQ compound orally once a day for 14 days and then performed biochemical tests, histopathological observations, ELISA, and Western blotting analysis. The method used is appropriate and appropriate. We would like to provide information that is also related to this method, namely endothelial-mesenchymal transition (EndMT) examination, which can measure Transforming growth factor β (TGF-β) to determine the severity of heart damage due to myocardial infarction by inducing EndMT in human umbilical vein endothelial cells, who were pretreated with RLX, 200 ng·mL-1, then with Notch inhibitor. Transwell cell migration was used to evaluate cell migration. CD31 and vimentin content was determined by fluorescence immuno-staining and subsequent Western blot analysis. Notch protein levels were checked by Western blot analysis.[3,4]

In conclusion, the results obtained by Xue Han et al, namely that LQ compounds can improve cardiac and EKG performance, reduce heart weight index, and reduce levels of heart-specific markers such as CK, CK-MB, LDH, cTnI, and BNP are appropriate. We would like to provide input for researchers who wish to carry out the same or related research to be able to continue this research on other degenerative diseases because this compound has many benefits that can continue to be developed in the future.

Disclosure

The authors report no conflicts of interest in this communication.

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