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Mangiferin Inhibited CVB3 Reproduction, Immune Regulation and Inhibiting Cell Apoptosis *In Vivo* and *In Vitro*

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Viral myocarditis (VMC) refers to the diffuse caused by viral infections or focal myocardial inflammatory cells infiltration and myocardial fiber necrosis or other degenerative diseases, lead to different levels of heart disease and other system damage. The virus that causes VMC mainly intestinal and respiratory viruses, about 50% of coxsackie B group virus, adenovirus, influenza virus, cytomegalovirus, etc all can cause myocarditis.There is no specific treatment in viral myocarditis (VMC), and treatment of traditional Chinese medicine (TCM) has a certain advantage. Mangiferin, a traditional Chinese medicine, is a major glucoside of xanthone in Anemarrhena rhizome, and has been reported to maintain anti-inflammatory, anti-fibrotic, anti diabetic and anti-viral effects. In vivo and in vitro studies from our latest research indicated mangiferin has definite effect for the treatment of VMC by inhibiting CVB3 reproduction, immune regulation and inhibiting cell apoptosis. In addition, mangiferin can also prevent the process of acute VMC to chronic dilated myocarditis, reduce the expression of white blood cell surface CAR levels, which the expression level of white blood cell surface CAR can be used as a testing index of virus persistent infection. Our research illustrated that TCM has an effect on whole multiple organs and systems, play the role of overall adjustment and avoid the adverse effect, thus TCM has great value on CVB3.

Biography:

Jun Hou is a vice professor and deputy director of the pharmacy in The General Hospital of Western Theater Command of PLA. She got her master's degree in pharmacy, Army Medical University (AMU) in 2005 and got her Ph.D. degree in pharmacology, AMU in 2011 and became associate professor since then. From 2014-2015, she worked in Canada as a visiting scientist. Now she has published more than 30 academic papers and got 2 items of academic awards. Her major interesting is focus on viral myocarditis and myocardial Autophagy and the molecular pathogenic mechanism.