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Hydrogen-Rich Saline Attenuates Cardiac and Hepatic Injury in Doxorubicin Rat Model by Inhibiting Inflammation and Apoptosis

Yunan Gao ¹, Hongxiao Yang ², Yanbin Fan ², Lin Li ², Jiahui Fang ², Wei Yang ²

Affiliations

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Erratum in

[Corrigendum to "Hydrogen-Rich Saline Attenuates Cardiac and Hepatic Injury in Doxorubicin Rat Model by Inhibiting Inflammation and Apoptosis"](#).

Gao Y, Yang H, Fan Y, Li L, Fang J, Yang W.

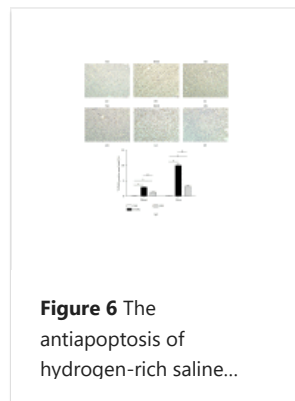
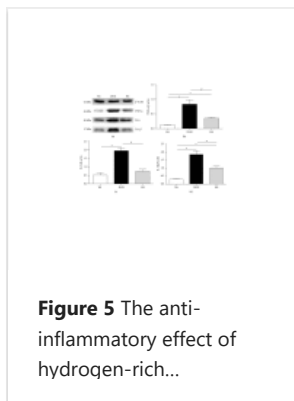
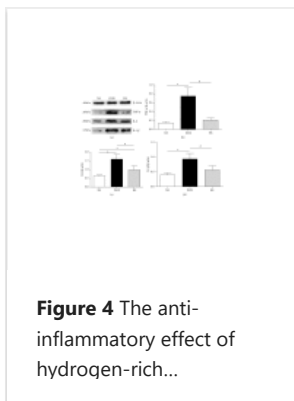
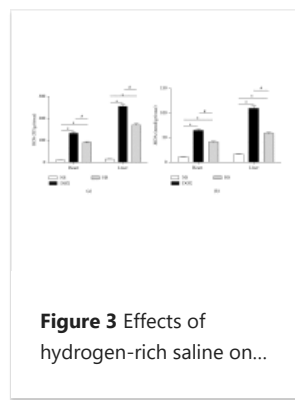
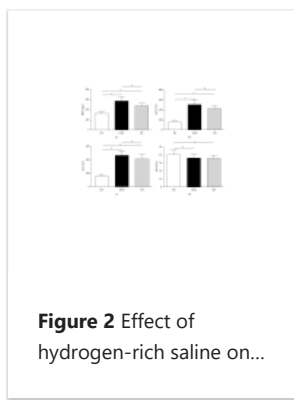
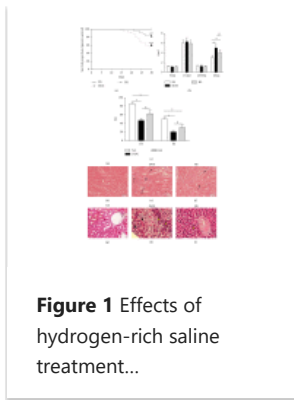
[Mediators Inflamm.](#) 2017;2017:3675910. doi: 10.1155/2017/3675910. Epub 2017 Oct 17.

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Abstract

Doxorubicin (DOX) remains the most effective anticancer agent which is widely used in several adult and pediatric cancers, but its application is limited for its cardiotoxicity and hepatotoxicity. Hydrogen, as a selective antioxidant, is a promising potential therapeutic option for many diseases. In this study, we found that intraperitoneal injection of hydrogen-rich saline (H₂ saline) ameliorated the mortality, cardiac dysfunction, and histopathological changes caused by DOX in rats. Meanwhile, serum brain natriuretic peptide (BNP), aspartate transaminase (AST), alanine transaminase (ALT), albumin (ALB), tissue reactive oxygen species (ROS), and malondialdehyde (MDA) levels were also attenuated after H₂ saline treatment. What is more, we further demonstrated that H₂ saline treatment could inhibit cardiac and hepatic inflammation and apoptosis relative proteins expressions by western blotting test. In conclusion, our results revealed a protective effect of H₂ saline on DOX-induced cardiotoxicity and hepatotoxicity in rats by inhibiting inflammation and apoptosis.

Figures



All figures (8)

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