

[Pharmazie](#). 2014 Aug;69(8):633-6.

## Hydrogen-containing saline attenuates doxorubicin-induced heart failure in rats

[Shujing Wu](#), [Liqun Zhu](#), [Jing Yang](#), [Zhixin Fan](#), [Yanli Dong](#), [Rui Luan](#), [Jingjing Cai](#), [Lu Fu](#)

PMID: 25158576

### Abstract

Interactions between doxorubicin (DOX) and iron generate reactive oxygen species and contribute to DOX-induced heart failure. Hydrogen, as a selective antioxidant, is a promising potential therapeutic option for the treatment of a variety of diseases. Therefore, we investigated the preventive effects of hydrogen treatment on DOX-induced heart failure in rats. We found that cardiac function was significantly improved and that the plasma levels of oxidative-stress markers and myocardial autophagic activity were decreased in animals treated with hydrogen-containing saline. Therefore, we conclude that hydrogen-containing saline may have beneficial effects for doxorubicin-induced heart failure.

### Related information

[PubChem Compound \(MeSH Keyword\)](#)

### LinkOut - more resources

#### Other Literature Sources

[The Lens - Patent Citations](#)

#### Medical

[MedlinePlus Health Information](#)