



Effect of Chinese herbal mixture, shock decoction on bacterial translocation from the gut

Ping Zhang, Wu-Ming Yang, Wen-Xia Shui, Yue-Guang Du, Guo-Ying Jin

Ping Zhang, Yue-Guang Du, Guo-Ying Jin, Department of Pathology, Zhejiang College of TCM, Hangzhou 310053, Zhejiang Province, China

Wu-Ming Yang, Department of Physiology, Zhejiang College of TCM, Hangzhou 310053, Zhejiang Province, China

Wen-Xia Shui, Department of TCM Internal Medicine, Zhejiang College of TCM, Hangzhou 310053, Zhejiang Province, China

Author contributions: All authors contributed equally to the work.

Supported by TCM Administration Bureau of Zhejiang Province (1993-8)

Correspondence to: Dr. Ping Zhang, Department of Pathology, Zhejiang College of TCM, Hangzhou 310053, China. amongcool@sina.com
Telephone: +86-571-7045961

Received: November 9, 1999
Revised: June 3, 2000
Accepted: July 10, 2000
Published online: September 15, 2000

Abstract

AIM: To provide the TCM therapeutic basis for MODS in clinical critical patients, the role of shock decoction in anti bacterial translocation from the gut was tested in rats.

METHODS: Based on the pathophysiology of MODS following bacterial translocation from the gut caused by severe injuries such as burn, shock, hemorrhagic shock model that induced obvious bacterial translocation was established and used to determine whether shock decoction, that is composed of modified Wenpi Decoction, reduces

bacterial translocation. Bacterial culture for mesenteric lymph nodes, liver and spleen of rats in shock, treatment and control groups was used to calculate the incidence of bacterial translocation.

RESULTS: The incidence of intestinal bacteria translocating to mesenteric lymph nodes, liver and spleen was lower in the shocked rats infused *via* gastrogavage with shock decoction (3/15) than that in the non-infused shocked rats (11/13), ($P = 0.0009$, < 0.01). The incidence of intestinal bacteria translocation of rats in shock and control groups were distinctly different ($P = 0.0017$, < 0.01). The amounts and species of intestinal flora between infused and noninfused shocked rats were not different statistically ($P = 0.101$, $P > 0.05$). Histological examination showed that intestinal mucosa edema was severer in the shocked rats than in the shocked rats with gastrogavage.

CONCLUSION: Shock beverage could inhibit the shock induced enterogenous bacterial translocation in rats probably by its protective role in intestinal mucosa structure; and has no effect on the growth of intestinal bacteria.

Key words: Critical illness; Enterobactin; Gut origin sepsis; Multiple organ dysfunction syndrome (MODS); Multiple organ failure; Anti-bacterial translocation from the gut; Shock; Chinese herb

© The Author(s) 2000. Published by Baishideng Publishing Group Inc. All rights reserved.

Zhang P, Yang WM, Shui WX, Du YG, Jin GY. Effect of Chinese herb mixture, shock decoction on bacterial translocation from the gut. *World J Gastroenterology* 2000; 6(Suppl 3): 126 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v3/iSuppl3/126.htm> DOI: <http://dx.doi.org/10.3748/wjg.v3.iSuppl3.126>

E- Editor: Hu S



Published by **Baishideng Publishing Group Inc**

8226 Regency Drive, Pleasanton, CA 94588, USA

Telephone: +1-925-223-8242

Fax: +1-925-223-8243

E-mail: bpgoffice@wjgnet.com

Help Desk: <http://www.wjgnet.com/esps/helpdesk.aspx>

<http://www.wjgnet.com>

