

Effect and mechanism of Rhizoma Atractylodis Macrocephalae on gastrointestinal motility in animals

Xiao-Song Ma, Ye-Shan Xin

Xiao-Song Ma, Ye-Shan Xin, Department of Physiology, Guangzhou Medical College, Guangzhou 510182, Guangdong Province, China

Author contributions: All authors contributed equally to the work.

Original title: *China National Journal of New Gastroenterology* (1995-1997) renamed *World Journal of Gastroenterology* (1998-).

Received: September 12, 1995

Revised: April 22, 1996

Accepted: May 13, 1996

Published online: September 15, 1996

Abstract

AIM: The effect of different doses of Rhizoma Atractylodis Macrocephalae (RAM) on the spontaneous contraction of isolated guinea pig ileum was examined.

METHODS: RAM 0.1 μ slightly inhibited the spontaneous contraction of isolated guinea pig ileum; RAM 0.2 μ or higher concentrations significantly enhanced the spontaneous contraction of isolated guinea pig ileum in dose dependent manner. The distance traveled by charcoal meal through the small intestine in mice measured in terms

of propulsive motility.

RESULTS: (1) RAM 0.1 mg/10 g weight markedly increased the propulsive distance of charcoal meal in mice, the effects were abolished by atropin (0.1 mg/10 g weight IP); (2) Regitine (0.03 mg/10 g weight IP) partly blocked the increased gastrointestinal propulsive motility by RAM; (3) No effects were found on the increased gastrointestinal propulsive motility after injection of propranolol (0.07 mg/10 g with IP).

CONCLUSION: The results indicate that RAM has an exciting effect on the propulsive motility of gastrointestinal tract, which may be mediated *via* M receptor and α receptor.

Key words: Rhizoma atractylodis macrocephalae; Isolate guinea pig ileum; Gastrointestinal; Propulsive motility; M receptor α receptor

© **The Author(s) 1996.** Published by Baishideng Publishing Group Inc. All rights reserved.

Ma XS, Xin YS. Effect and mechanism of Rhizoma Atractylodis Macrocephalae on gastrointestinal motility in animals. *World J Gastroenterol* 1996; 2(Suppl1): 52 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v2/iSuppl1/52.htm> DOI: <http://dx.doi.org/10.3748/wjg.v2.iSuppl1.52>

E- Editor: Liu WX



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>

