

Influence of fever on biliary elements of guinea pigs

Hou-Dong Lü, Ming-Guo Tian, Xiao-Peng Zhang, Huai-Lan Li

Hou-Dong Lü, Department of Microbiology, Jining Medical College, Jining 272113, Shandong Province, China

Ming-Guo Tian, Xiao-Peng Zhang, Department of Surgery, Jining Medical College, Jining 272113, Shandong Province, China

Huai-Lan Li, Linyi Municipal First People's Hospital, Linyi 276003, Shandong Province, China

Received: October 6, 1996
Revised: December 13, 1996
Accepted: June 28, 1997
Published online: December 15, 1997

Abstract

AIM: To study the influence of fever on biliary elements and gallstone formation in guinea pigs.

METHODS: Sixty guinea pigs were randomly divided and fed either a lithogenic diet (to induce gallstone formation) or a normal diet (for use as the non-gallstone controls), and each group was then subdivided into fever or non-fever subgroups. The fever condition was induced by subcutaneous injection of boiled non-fat milk (1

mL/kg, once a week for 4 wk). After 45 d, all the animals were euthanized for analysis; however, 36 h prior to euthanasia, the guinea pigs in the fever subgroups were injected subcutaneously with turpentine (1 mL/kg) to maintain the fever condition. Gallbladder lumens were examined and bile samples were analyzed.

RESULTS: Gallstone incidence was highest (40%, 6/15) in the group of animals that were fed the lithogenic diet and had fever. Compared to the non-fever subgroups, the fever subgroups had significantly higher total bile protein and bilirubin.

CONCLUSION: Fever influences biliary elements and may contribute to gallstone formation in guinea pigs.

Key words: Fever; Bile/metabolism; Bilirubin/metabolism; Cholelithiasis/etiology; Proteins/metabolism

© The Author(s) 1997. Published by Baishideng Publishing Group Inc. All rights reserved.

Lü HD, Tian MG, Zhang XP, Li HL. Influence of fever on biliary elements of guinea pigs. *World J Gastroenterol* 1997; 3(4): 265 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v3/i4/265.htm> DOI: <http://dx.doi.org/10.3748/wjg.v3.i4.265>

L- Editor: Filipodia 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>



ISSN 1007 - 9327

