

中华医学会系列杂志

ISSN 2095-4255

CN 23-1583/R

# 中华地方病学杂志<sup>®</sup>

(原刊名《中国地方病学杂志》)

ZHONGHUA DIFANGBINGXUE ZAZHI

2016年7月 第35卷 第7期

## CHINESE JOURNAL OF ENDEMIOLOGY

Volume 35 Number 7

July 2016



中华医学会

CHINESE  
MEDICAL  
ASSOCIATION

ISSN 2095-4255



9 772095 425167

# 中华地方病学杂志<sup>®</sup>

CHINESE JOURNAL OF ENDEMIOLOGY

月刊 1982年1月创刊 第35卷 第7期 2016年7月20日出版

## 主管

中华人民共和国国家卫生和  
计划生育委员会

## 主办

中华医学会  
100710,北京市东四西大街42号  
哈尔滨医科大学  
150081,哈尔滨市南岗区保健路157号

## 编辑

中华地方病学杂志编辑委员会  
150081,哈尔滨市南岗区保健路157号  
电话(传真):(0451)86675924  
Email:cje2005@163.com  
http://www.medline.org.cn

## 总编辑

孙殿军

## 编辑部主任

王丹娜

## 出版

《中华医学杂志》社  
有限责任公司  
100710,北京市东四西大街42号  
电话(传真):(010)85158180  
Email:office@cma.org.cn

## 广告经营许可证

哈工商广字 2301004010006 号

## 印刷

黑龙江龙江传媒有限责任公司

## 发行

范围:公开  
国内:哈尔滨市邮政局  
国外:中国国际图书贸易总公司  
(北京:399信箱,100044)  
代号 BM 4181

## 订购

全国各地邮政局  
邮发代号 14-30

## 邮购

中华地方病学杂志编辑部  
150081,哈尔滨市南岗区保健路157号  
电话(传真):(0451)86675924  
Email:cje2005@163.com

## 定价

每期 12.00 元,全年 144.00 元

## 中国标准连续出版物号

ISSN 2095-4255  
CN 23-1583/R

## 2016年版权归中华医学会所有

未经授权,不得转载、摘编本刊文  
章,不得使用本刊的版式设计

除非特别声明,本刊刊出的所有文  
章不代表中华医学会和本刊编委  
会的观点

本刊如有印装质量问题,请向中华  
地方病学杂志编辑部调换

## 目次

### 述评

- 关注大骨节病研究进展 ..... 469  
王治伦 陈群

### 论著

- 大骨节病和骨性关节炎差异基因的  
互作网络分析研究 ..... 472

段琛 李萌 张晓东 魏艳玲 贺小玉 郭雄

- T-2 毒素和硒对软骨不同分化层细胞  
增殖的影响 ..... 477

何颖 陈静宏 张丹 王梦莹 曹峻岭 张莹

马天有 张迎 刘慧中

- 砷对小鼠皮肤黑色素合成的影响  
及 N-乙酰半胱氨酸干预的研究 ..... 483

赵倩 王美 田凤洁 康静 刘丹丹 白聪 赵海宝 裴秋玲

- 潜在型克山病心脏正电子发射断层显像与心肌  
损伤及抗氧化标志和心脏功能的关系 ..... 488

吴欢 王铜 于丽娟 李迎群 徐伯楠 刘红 刘亚滨

郭子丹 王龔 庞宏洋 高祥芝 金刚 刘玉婷 刘白鹭

- 潜在型克山病心脏单光子发射型计算机断层显像评分  
与心脏生物标志物及超声指标的关系 ..... 493

高祥芝 金刚 王铜 刘玉婷 徐伯楠 刘红 庞宏洋

吴欢 于丽娟 李迎群 刘白鹭

- 不同疫源地鼠疫宿主动物的 DNA 条形码比较研究 ..... 498

刘芳 常子丽 胡艳红 武正华 李建云 马志东 张忠兵

### 现场调查

- 四川省阿坝州大骨节病患者患病及生活现状调查 ..... 502

刘玲 马文军 秦胜超 明迪尧

- 哈尔滨市大骨节病病区和病情基数现状调查 ..... 508

曹建滨 高晓丽 张文翠 门璐 吕杰 刘辉 戴晓滨

- 天津市不同孕期孕妇碘营养及甲状腺功能调查 ..... 512

刘忠慧 王洋 马圣兰 李娟 吴佐军 侯常春

- 2014 年贵州省遵义市 4 个县(区)居民  
碘营养水平调查结果分析 ..... 517

谭红辉 李林英 陈浩

2010 - 2014 年浙江省肾综合征出血热流行特征分析 .....	520
张蓉 姚芊芊 徐芳 孙继民 卢苗贵 施旭光 任江萍 龚震宇	
<b>专家论坛</b>	
西藏大骨节病病区肱骨短小症与大骨节病关系的分析 .....	525
李群伟 龚弘强	
<b>简    报</b>	
2010 年青海省大骨节病病情监测报告 .....	530
李强 周昕 赵志军 杨佩珍 胡兰盛 蒲光兰	
2000 - 2013 年青海省贵德县儿童大骨节病监测报告 .....	531
史欣慧 赵志军 李强 杨佩珍 胡兰盛 余慧珍 周昕 蒲光兰	
冯建萍 祖雅智 何海燕	
碱灰化砷铈催化分光光度法测定食品中碘的心得体会 .....	532
余慧珍 何多龙 孟献亚 杨佩珍 陈勋 李亚楠 李强 赵志军	
2005 - 2015 年湖北省汉川市居民食用碘盐监测结果分析 .....	533
舒端 李佩君 周昭红	
<b>综    述</b>	
骨保护素、胰岛素样生长因子-1 对骨关节炎骨重建作用的研究进展 .....	534
邓红霞 闫云飞 于钧	
T-2 毒素对孕鼠及子代小鼠影响的研究进展 .....	540
李添添 任海娟 曹艳红	
布鲁菌病性心内膜炎文献分析 .....	543
贾斌 张跃新	
<b>读者·作者·编者</b>	
英文摘要中作者姓名的拼写方法 .....	497
关于《中华地方病学杂志》刊出论文中英文缩写的公告 .....	524
关于关键词的标引 .....	529
<b>消    息</b>	
中华医学会第九次全国地方病学术会议征文通知 .....	482
关于中华医学会系列杂志投稿网址的声明 .....	487
2016 年《中华地方病学杂志》征订启事 .....	511
《中华地方病学杂志》第七届编辑委员会组成人员名单 .....	封二
《中华地方病学杂志》稿约 .....	I

本期责任编辑 周静 英文编辑 唐晓波

# CHINESE JOURNAL OF ENDEMIOLOGY

Monthly      Established in January 1982      Volume 35, Number 7      July 20, 2016

## Responsible Institution

National Health and Family  
Planning Commission of the  
People's Republic of China

## Sponsor

Chinese Medical Association  
42 Dongsi Xidajie, Beijing 100710, China  
Harbin Medical University  
157 Baojian Road, Nangang District, Harbin  
150081, China

## Editing

Editorial Board of Chinese  
Journal of Endemiology  
157 Baojian Road, Nangang District, Harbin  
150081, China  
Tel (Fax): 0086-451-86675924  
Email: cje2005@163.com  
http://www.medline.org.cn

## Editor-in-Chief

Sun Dianjun (孙殿军)

## Managing Director

Wang Danna (王丹娜)

## Publishing

Chinese Medical Journals  
Publishing House Co., Ltd.  
42 Dongsi Xidajie, Beijing 100710, China  
Tel (Fax): 0086-10-85158180  
Email: office@cma.org.cn

## Printing

Heilongjiang Longjiang  
Media Co., Ltd.

## Overseas Distributor

China International Book  
Trading Corporation  
P.O.Box 399, Beijing 100044, China  
Code No. BM 4181

## Mail-Order

Publishing House of Chinese  
Journal of Endemiology  
157 Baojian Road, Nangang District, Harbin  
150081, China  
Tel (Fax): 0086-451-86675924  
Email: cje2005@163.com

## CSSN

ISSN 2095-4255  
CN 23-1583/R

## Copyright © 2016 by the Chinese Medical Association

No content published by the journals of  
Chinese Medical Association may be  
reproduced or abridged without authorization.  
Please do not use or copy the layout and design  
of the journals without permission.

All articles published represent the opinions  
of the authors, and do not reflect the official  
policy of the Chinese Journal of Endemiology  
or the Editorial Board, unless this is clearly  
specified.

## CONTENTS IN BRIEF

### Editorial

- Research progress made in Kashin-Beck disease ..... 469  
*Wang Zhilun, Chen Qun*

### Original Articles

- Interaction network of differentially expressed genes between  
Kashin-Beck disease and osteoarthritis ..... 472  
*Duan Chen, Li Meng, Zhang Xiaodong, Wei Yanling, He Xiaoyu, Guo Xiong*
- Effects of T-2 toxin and selenium on cell proliferation in murine  
pre-chondrogenic cell line at different differentiation stages ..... 477  
*He Ying, Chen Jinghong, Zhang Dan, Wang Mengying, Cao Junling,  
Zhang Ying, Ma Tianyou, Zhang Ying, Liu Huizhong*
- The effects of arsenic on melanin synthesis in C57BL/6J mice  
and the intervention role of N-acetylcysteine ..... 483  
*Zhao Qian, Wang Mei, Tian Fengjie, Kang Jing, Liu Dandan,  
Bai Cong, Zhao Haibao, Pei Qiuling*
- The relationship between cardiac positron emission tomography of  
latent Keshan disease and the markers of myocardial injury  
and antioxidation and markers of heart function ..... 488  
*Wu Huan, Wang Tong, Yu Lijuan, Li Yingci, Xu Bainan, Liu Hong,  
Liu Yabin, Guo Zidan, Wang Yan, Pang Hongyang, Gao Xiangzhi,  
Jin Gang, Liu Yuting, Liu Bailu*
- The relationship between cardiac single-photon emission computed  
tomography imaging scores of latent Keshan disease and the  
parameters of cardiac biomarkers and echocardiography ..... 493  
*Gao Xiangzhi, Jin Gang, Wang Tong, Liu Yuting, Xu Bainan, Liu Hong,  
Pang Hongyang, Wu Huan, Yu Lijuan, Li Yingci, Liu Bailu*
- A comparative study of DNA barcode of plague host animals between  
different foci ..... 498  
*Liu Fang, Chang Zili, Hu Yanhong, Wu Zhenghua, Li Jianyun,  
Ma Zhidong, Zhang Zhongbing*

### Field Epidemiological Investigations

- A cross-sectional study of Kaschin-Beck disease and living conditions  
of the patients in Aba Autonomous Prefecture of Sichuan Province ..... 502  
*Liu Ling, Ma Wenjun, Qin Shengchao, Ming Diyao*
- A cross-sectional study of Kaschin-Beck disease areas  
and epidemic situation in Harbin ..... 508  
*Cao Jianbin, Gao Xiaoli, Zhang Wencui, Men Lu, Lyu Jie, Liu Hui,  
Dai Xiaobin*

<b>Iodine nutritional status and thyroid function among pregnant women in different periods of pregnancy in Tianjin</b> .....	512
<i>Liu Zhonghui, Wang Yang, Ma Shenglan, Li Juan, Wu Zuojun, Hou Changchun</i>	
<b>Survey results of iodine nutrition level in 4 counties of Zunyi City, 2014</b> .....	517
<i>Tan Honghui, Li Linying, Chen Hao</i>	
<b>Analysis of epidemiological characteristics of hemorrhagic fever with renal syndrome in Zhejiang Province, China, 2010 – 2014</b> .....	520
<i>Zhang Rong, Yao Pingping, Xu Fang, Sun Jimin, Lu Miaogui, Shi Xuguang, Ren Jiangping, Gong Zhenyu</i>	
<b>Expert Article</b>	
<b>Relationship between short humerus disease and Kashin Beck disease in Kaschin–Beck disease areas in Tibet</b> .....	525
<i>Li Qunwei, Gong Hongqiang</i>	
<b>Brief Reports</b>	
<b>The monitoring report of the prevalence of Kaschin–Beck disease in Qinghai Province in 2010</b> .....	530
<i>Li Qiang, Zhou Xin, Zhao Zhijun, Yang Peizhen, Hu Lansheng, Pu Guanglan</i>	
<b>The monitoring report of the prevalence of children’s Kaschin–Beck disease from 2000 to 2013 in Guide County, Qinghai Province</b> .....	531
<i>Shi Xinhui, Zhao Zhijun, Li Qiang, Yang Peizhen, Hu Lansheng, Yu Huizhen, Zhou Xin, Pu Guanglan, Feng Jianping, Zu Yazhi, He Haiyan</i>	
<b>Experiences in iodine determination in foods by alkaline ashing–As<sup>3+</sup>–Ce<sup>4+</sup> catalytic spectrophotometric method</b> .....	532
<i>Yu Huizhen, He Duolong, Meng Xianya, Yang Peizhen, Chen Xun, Li Yanan, Li Qiang, Zhao Zhijun</i>	
<b>The analysis of Hanchuan residents’ consumption of iodized salt monitoring results 2005 – 2015 in Hubei Province</b> .....	533
<i>Shu Rui, Li Peijun, Zhou Shaohong</i>	
<b>Reviews</b>	
<b>Advances in impacts of osteoprotegerin and insulin–like growth factor–1 on bone remodeling in osteoarthritis</b> .....	534
<i>Deng Hongxia, Yan Yunfei, Yu Jun</i>	
<b>Research progress of T–2 toxin induced effects on pregnant mice and generation mice</b> .....	540
<i>Li Tiantian, Ren Haijuan, Cao Yanhong</i>	
<b>Literature analysis of <i>Brucella</i> endocarditis</b> .....	543
<i>Jia Bin, Zhang Yuexin</i>	

<b>Iodine nutritional status and thyroid function among pregnant women in different periods of pregnancy in Tianjin</b> .....	512
<i>Liu Zhonghui, Wang Yang, Ma Shenglan, Li Juan, Wu Zuojun, Hou Changchun</i>	
<b>Survey results of iodine nutrition level in 4 counties of Zunyi City, 2014</b> .....	517
<i>Tan Honghui, Li Linying, Chen Hao</i>	
<b>Analysis of epidemiological characteristics of hemorrhagic fever with renal syndrome in Zhejiang Province, China, 2010 – 2014</b> .....	520
<i>Zhang Rong, Yao Pingping, Xu Fang, Sun Jimin, Lu Miaogui, Shi Xuguang, Ren Jiangping, Gong Zhenyu</i>	
<b>Expert Article</b>	
<b>Relationship between short humerus disease and Kashin Beck disease in Kaschin–Beck disease areas in Tibet</b> .....	525
<i>Li Qunwei, Gong Hongqiang</i>	
<b>Brief Reports</b>	
<b>The monitoring report of the prevalence of Kaschin–Beck disease in Qinghai Province in 2010</b> .....	530
<i>Li Qiang, Zhou Xin, Zhao Zhijun, Yang Peizhen, Hu Lansheng, Pu Guanglan</i>	
<b>The monitoring report of the prevalence of children’s Kaschin–Beck disease from 2000 to 2013 in Guide County, Qinghai Province</b> .....	531
<i>Shi Xinhui, Zhao Zhijun, Li Qiang, Yang Peizhen, Hu Lansheng, Yu Huizhen, Zhou Xin, Pu Guanglan, Feng Jianping, Zu Yazhi, He Haiyan</i>	
<b>Experiences in iodine determination in foods by alkaline ashing–As<sup>3+</sup>–Ce<sup>4+</sup> catalytic spectrophotometric method</b> .....	532
<i>Yu Huizhen, He Duolong, Meng Xianya, Yang Peizhen, Chen Xun, Li Yanan, Li Qiang, Zhao Zhijun</i>	
<b>The analysis of Hanchuan residents’ consumption of iodized salt monitoring results 2005 – 2015 in Hubei Province</b> .....	533
<i>Shu Rui, Li Peijun, Zhou Shaohong</i>	
<b>Reviews</b>	
<b>Advances in impacts of osteoprotegerin and insulin–like growth factor–1 on bone remodeling in osteoarthritis</b> .....	534
<i>Deng Hongxia, Yan Yunfei, Yu Jun</i>	
<b>Research progress of T–2 toxin induced effects on pregnant mice and generation mice</b> .....	540
<i>Li Tiantian, Ren Haijuan, Cao Yanhong</i>	
<b>Literature analysis of <i>Brucella</i> endocarditis</b> .....	543
<i>Jia Bin, Zhang Yuexin</i>	