



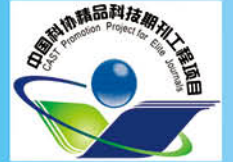
ISSN 1005-4529  
CN 11-3456/R  
CODEN-ZYGZFB

# 中华医院感染学杂志

ZHONGHUA YIYUANGANRANXUE ZAZHI

2018年10月 第28卷 第19期 Oct.2018 Vol.28 No.19

CJHI



CHINESE JOURNAL OF NOSOCOMIOLOGY

中国人民解放军总医院 主管  
中华预防医学会 主办  
中国人民解放军总医院

中国精品科技期刊  
中国百种杰出学术期刊  
RCCSE 中国权威学术期刊  
中文核心期刊  
中国自然科学核心期刊  
中国医药卫生核心期刊  
中国学术期刊文摘收录刊

精品科技期刊 TOP 50  
USA-CA 来源期刊  
USA-CSA 来源期刊  
POL-IC 来源期刊  
JPN-JST 来源期刊  
UK-CABI 来源期刊  
USA- Ulrichsweb 来源期刊  
WHO-WPRIM 来源期刊



中华预防医学会系列杂志  
SERIAL JOURNAL OF CHINA PREVENTIVE MEDICINE ASSOCIATION

19  
2018

# 中华医院感染学杂志

ZHONGHUA YIYUANGANRANXUE ZAZHI

半月刊 1991年9月创刊 第28卷 第19期 2018年10月10日出版

## 主 管

中国人民解放军总医院  
100039,北京市复兴路28号

## 主 办

中华预防医学会  
100021,北京市朝阳区华威里25号  
中国人民解放军总医院  
100039,北京市复兴路28号

## 编 辑

中华医院感染学杂志编辑委员会  
100039,北京市复兴路28号  
电话:(010)66939464  
E-mail:zhyygrxzz@163.com  
投稿 E-mail:zhyy6688@163.com

## 编辑委员会主任委员

陈景元

## 主 编

刘运喜

## 编辑部主任

索继江

## 出 版

中华医院感染学杂志社  
100039,北京市复兴路28号  
电话:(010)68295439  
网址: <http://www.zhyygrxzzs.org>

## 印 刷

廊坊飞腾印刷包装有限公司

## 发 行

国内:北京报刊发行局  
国外:中国国际图书贸易总公司  
(北京399信箱,100044)  
代号:1680MO

## 订 购

全国各地邮电局  
邮发代号:82-747

## 邮 购

中华医院感染学杂志社  
100039,北京市复兴路28号  
电话:(010)66939464

## 定 价

每期18元,全年432元

## 中国标准连续出版物号

ISSN 1005-4529  
CN 11-3456/R

2018年版权归中华预防医学会和  
中华医院感染学杂志社所有

本刊刊出的所有文章不代表中华预防  
医学会和本刊编委会的观点,除  
非特别声明

本刊如有印装质量问题,请向本刊  
编辑部调换

万方数据

## 目 次

### 论 著

肺炎克雷伯菌两种感染方法小鼠模型的研究

..... 刘洋,李艳菊,陶奕汐,等 (2881)

NICU肺炎克雷伯菌医院感染的病房环境传播特征研究

..... 宋婧源,许亚茹,元小冬,等 (2885)

阴沟肠杆菌分离株五类抗菌药物耐药基因元件分析

..... 张卉,徐燕,荆兆海,等 (2889)

经修饰 CHROMagar 不动杆菌显色培养联合 MALDI-TOF-MS

快速筛查肠道耐碳青霉烯鲍氏不动杆菌的研究

..... 卫丽,乔甫,林吉,等 (2893)

粪肠球菌对肺炎链球菌的体外抑制作用

..... 谢宁,蔡明池,刘婧,等 (2898)

耐万古霉素肠球菌血流感染相关因素分析

..... 叶小群,杨青,严平,等 (2901)

去甲肾上腺素对感染性休克患者血流动力学与肾灌注的影响

..... 邢适颖,董平栓,李志娟,等 (2905)

血清 PCT 和 CRP 及 D-D 水平与危重症感染患者 IPS 评分的关系

..... 田建华,张新枝,王洪,等 (2910)

彩色多普勒超声联合肾功能检查对重症医院感染患者急性

肾损伤的诊断价值 ..... 邹洪庆,王勇,陈新伟,等 (2914)

急性脑梗死患者医院感染病原菌及耐药性分析

..... 付晶,王一凡,施阳,等 (2917)

老年大面积脑梗死患者肺部感染病原菌与相关因素分析

..... 郭仕峰,李广峰,孙晓东,等 (2921)

呼吸机相关肺炎相关因素分析及综合干预措施的预防效果

..... 王兆霞, 张起, 侯慧峰, 等 (2924)

CT 影像学技术在肺结核患者曲霉菌属感染中的诊断价值

..... 洪宗启, 刘斌, 裴仁明, 等 (2928)

开放性结核病患者住院期间医院感染的特点及预防对策 ..... 周新玲, 袁伟, 韩颖, 等 (2932)

持续性房颤合并肺部感染患者血清炎症因子水平与左心房重构的相关性研究

..... 孙国栋, 郑成根, 陈春华, 等 (2936)

肝硬化腹水患者合并自发性细菌性腹膜炎病原菌及相关因素分析

..... 顾君娣, 陆佳敏, 江军, 等 (2940)

腹膜透析相关性腹膜炎患者病原菌及相关因素分析 ..... 吴小漫, 邓丽萍, 麦美芳, 等 (2944)

尿激酶联合肝素封管对长期血液透析患者中心静脉导管感染与通畅性的影响

..... 刘敏洁, 薛现军, 席好静, 等 (2948)

淋巴瘤患者化疗期间 IV 骨髓抑制期感染病原菌与相关因素分析

..... 张璋, 方小洁, 邝绮华, 等 (2952)

稳定期慢性阻塞性肺疾病患者 Hp 感染对病情的影响 ..... 方桂桔, 吴廷文, 薛青, 等 (2956)

<sup>14</sup>C 呼气试验对武昌地区健康体检人群 Hp 感染的检测价值

..... 高彦荣, 何青峰, 王丽江, 等 (2961)

HBV 基因型及服药依从性与 NAs 耐药突变位点的相关性

..... 杨国绘, 窦琳琳, 汪敏, 等 (2964)

神经外科手术患者医院感染特点与影响因素分析 ..... 周航, 王飞, 李建萍, 等 (2969)

益生菌联合早期肠内营养对重型颅脑损伤患者感染及免疫功能的影响

..... 李俊蕾, 陆蓉, 廖天芬, 等 (2973)

肝叶切除术患者术后感染病原菌及相关因素分析 ..... 黄红兰, 黄议, 周廷梅, 等 (2977)

急性冠脉综合征患者 PCI 手术后 Hp 感染相关因素分析 ..... 朱便茹, 崔树梅, 崔国峰 (2981)

不同时机肠内营养对重症胰腺炎患者免疫功能及感染的影响

..... 王辉, 徐斌, 许中友, 等 (2985)

骨质疏松性骨折患者术后医院感染临床特征与相关因素分析

..... 万方数据 ..... 程福平, 王斌, 梁军波, 等 (2988)

## 乳腺癌患者 PICC 置管期感染相关因素及应对措施

..... 任世强, 张春旭, 陈秉烈, 等 (2992)

某医院就诊女性人群 HPV 感染率及亚型分析 ..... 张鸢, 韩一栩, 周小飞, 等 (2996)

糖尿病产妇会阴切口感染病原菌与相关因素分析 ..... 刘开宏, 郝洁倩, 商蕊, 等 (3000)

## 极低体质量新生儿早发型败血症的临床特点及相关因素分析

..... 戴海燕, 钱燕, 徐爱琴, 等 (3003)

## hs-CRP 与 PCT 及炎症因子在新生儿消化系统感染性疾病中的诊断价值

..... 蒋义贵, 曹美娟, 张生君, 等 (3007)

## 感染管理研究

### CUSUM 预警模型在医院感染性腹泻暴发预警中的应用

..... 钱子煜, 张越文, 马小越, 等 (3011)

医学生医院感染防控知识培训效果评价 ..... 李静, 胡爱香, 张越巍, 等 (3016)

### 人性化干预管理联合进食体位指导预防脑卒中后吞咽障碍患者肺部感染的应用研究

..... 蒋愈娇, 文国强, 黄莉 (3019)

### 缩唇腹式呼吸训练与肺功能锻炼对肺癌手术患者肺部感染的影响

..... 王光珏, 潘超, 徐畅, 等 (3023)

重症监护病房高频接触表面清洁消毒干预效果评价 ..... 吴睿, 许斯, 张艳, 等 (3026)

两种清洗消毒方式对消化内镜消毒的效果 ..... 王玲, 张伟, 范晶晶, 等 (3029)

## SIFIC

### 2012—2017 年住院患者 MRSA 流行病学变化趋势分析

..... 张静, 张琪, 耿静 (3033)

### 通过暴发案例归纳医疗机构水源性感染的预防与控制

..... 孙庆芬, 王广芬, 韩玲样, 等 (3037)

# CHINESE JOURNAL OF NOSOCOMIOLOGY

Semimonthly

Established in September, 1991

Volume 28 Number 19

October 10, 2018

## Responsible Institution

General Hospital of PLA  
28 Fuxing Road, Beijing 100039, PR China

## Sponsor

Chinese Preventive Medicine Association  
No 25 Huaweili, Chaoyang District, Beijing  
General Hospital of PLA  
28 Fuxing Road, Beijing 100039, PR China

## Editing

Editorial Committee of Chinese  
Journal of Nosocomiology  
28 Fuxing Road Beijing 100039, PR China  
Tel: 0086-10-66939464  
E-Mail: zhyygrxz@163.com

## Chairman of the Editorial Committee

CHEN Jing-yuan (陈景元)

## Editor-in-Chief

LIU Yun-xi (刘运喜)

## Managing Director

SUO Ji-jiang (索继江)

## Publishing

Chinese Journal of Nosocomiology Press  
28 Fuxing Road, Beijing 100039, PR China  
Tel: 0086-10-68295439  
Web Site: <http://www.zhyygrxz.org>

## Printing

Langfang Feiteng Printing & Packing Co LTD

## Overseas Distributor

China International Book Trading  
Corporation  
P.O Box 399, Beijing, PR China  
Code No. 1680BM

## Mail-Order

Chinese Journal of Nosocomiology Press  
28 Fuxing Road, Beijing 100039, PR China  
Tel: 0086-10-66939464

## CSSN

ISSN 1005-4529  
CN 11-3456/R

## CODEN

ZYGZFB

Copyright © 2018 by the

Chinese Preventive Medicine Association and  
Chinese Journal of Nosocomiology

All articles published represent the opinions of the authors, do not reflect the official policy of the Chinese Preventive Medicine Association or the Editorial Committee unless this is clearly specified.

## CONTENTS IN BRIEF

### Original Articles

#### Two kinds of infection methods for *Klebsiella pneumoniae* mice model

..... LIU Yang, LI Yan-ju, TAO Yi-xi, *et al* (2881)

#### Environmental propagation characteristics of nosocomial

#### infection with *Klebsiella pneumoniae* of patients in NICU

..... SONG Jing-yuan, XU Ya-ru, YUAN Xiao-dong, *et al* (2885)

#### Investigation of resistance genes to 5 kinds of antimicrobial agents in

#### *Enterobacter cloacae*

..... ZHANG Hui, XU Yan, JING Zhao-hai, *et al* (2889)

#### Modified CHROMagar *Acinetobacter* chromogenic culture combined with

#### MALDI-TOF-MS for rapid screening of carbapenem-resistant

#### *Acinetobacter baumannii* from human gut

..... WEI Li, QIAO Fu, LIN Ji, *et al* (2893)

#### Inhibition of *Enterococcus faecalis* against *Streptococcus pneumoniae* in vitro

..... XIE Ning, CAI Ming-chi, LIU Jing, *et al* (2898)

#### Risk factors for the distribution and infection of vancomycin-resistant

#### *Enterococcus* bloodstream infection strains

..... YE Xiao-qun, YANG Qing, YAN Ping, *et al* (2901)

#### Effect of norepinephrine on hemodynamics and renal perfusion in

#### patients with septic shock

..... XING Shi-ying, DONG Ping-shuan, LI Zhi-juan, *et al* (2905)

#### Relationship between serum PCT, CRP, D-D levels and IPS score in

#### critically ill patients with infections

..... TIAN Jian-hua, ZHANG Xin-zhi, WANG Hong, *et al* (2910)

#### Diagnostic value of color Doppler ultrasonography combined with renal

#### function test in acute renal injury in patients with critical

#### nosocomial infections

..... ZOU Hong-qing, WANG Yong, CHEN Xin-wei, *et al* (2914)

- Analysis on the distribution and drug resistance of pathogens of nosocomial infections in patients with acute cerebral infarctions in emergency department** ..... FU Jing , WANG Yi-fan , SHI Yang , *et al* (2917)
- The etiology and risk factors of pulmonary infections in elderly patients with large cerebral infarction** ..... GUO Shi-feng , LI Guang-feng , SUN Xiao-dong , *et al* (2921)
- Analysis of risk factors of ventilator associated pneumonia and comprehensive prevention measures for prevention of ventilator-associated pneumonia** ..... WANG Zhao-xia , ZHANG Qi , HOU Hui-feng , *et al* (2924)
- The value of CT imaging technique in the diagnosis of pulmonary tuberculosis complicated with Aspergillus infection** ..... HONG Zong-qi , LIU Bin , PEI Ren-ming , *et al* (2928)
- Clinical characteristics and preventive measures of nosocomial infections in patients with open tuberculosis during hospitalization** ..... ZHOU Xin-ling , YUAN Wei , HAN Ying , *et al* (2932)
- Changes of serum inflammatory factors in patients with persistent atrial fibrillation complicated with pulmonary infections and their correlation with left atrial remodeling** ..... SUN Guo-dong , ZHENG Cheng-gen , CHEN Chun-hua , *et al* (2936)
- Analysis of risk factors and pathogenicity of cirrhosis with ascites due to spontaneous bacterial peritonitis** ..... GU Jun-di , LU Jia-min , JIANG Jun , *et al* (2940)
- Analysis of risk factors and pathogenic characteristics of infections in patients with peritoneal dialysis associated peritonitis** ..... WU Xiao-man , DENG Li-ping , MAI Mei-fang , *et al* (2944)
- Effects of urokinase and heparin sealing on chronic central venous catheter infection and patency in patients with long-term hemodialysis** ..... LIU Min-jie , XUE Xian-jun , XI Yu-jing , *et al* (2948)
- Etiological characteristics , risk factors and preventive strategies of infections in IV bone marrow suppression period during chemotherapyof patients with lymphoma** ..... ZHANG Zhang , FANG Xiao-jie , KUANG Qi-hua , *et al* (2952)
- Analysis on the relationship between *Helicobacter pylori* infections and disease conditions in patients with stable chronic obstructive pulmonary disease** ..... FANG Gui-ju , WU Ting-wen , XUE Qing , *et al* (2956)
- Research on detection value of <sup>14</sup>C-urea breath test for *Helicobacter pylori* infection in health check-up population of Wuchang District** ..... GAO Yan-rong , HE Qing-feng , WANG Li-jiang , *et al* (2961)

- The correlation of hepatitis B virus genotypes and medication compliance with the occurrence of nucleos (t)ide analogues drug-resistance mutations** ..... YANG Guo-hui, DOU Lin-lin, WANG Min, *et al* (2964)
- Clinical characteristics and risk factors of nosocomial infections in neurosurgical patients**  
..... ZHOU Hang, WANG Fei, LI Jian-ping, *et al* (2969)
- Application of early enteral nutrition supplemented with probiotics in patients with severe craniocerebral injury and its effect on injection and immune function** ..... LI Jun-lei, LU Rong, LIAO Tian-fen, *et al* (2973)
- Investigation on postoperative infection of hepatic lobectomy and analysis of risk factors**  
..... HUANG Hong-lan, HUANG Yi, ZHOU Ting-mei, *et al* (2977)
- Risk factors of *Helicobacter pylori* infection in patients with acute coronary syndrome after PCI**  
..... ZHU Bian-ru, CUI Shu-mei, CUI Guo-feng (2981)
- Effect of enteral nutrition at different time on immune function and infection in patients with severe acute pancreatitis**  
..... WANG Hui, XU Bin, XU Zhong-you, *et al* (2985)
- Analysis of clinical characteristics and risk factors of postoperative nosocomial infections in patients with osteoporotic fracture**  
..... CHENG Fu-ping, WANG Bin, LIANG Jun-bo, *et al* (2988)
- Related factors of PICC catheterization infection in patients with breast cancer**  
..... REN Shi-qiang, ZHANG Chun-xu, CHEN Bing-lie, *et al* (2992)
- Analysis of infection rate and subtypes of HPV in female patients in a hospital**  
..... ZHANG Yuan, HAN Yi-xu, ZHOU Xiao-fei, *et al* (2996)
- Pathogen characteristics and risk factors of perineal incision infection in parturients with diabetes mellitus**  
..... LIU Kai-hong, HAO Jie-qian, SHANG Rui, *et al* (3000)
- Clinical characteristics and risk factors of early-onset sepsis in very low birth weight infants**  
..... DAI Hai-yan, QIAN Yan, XU Ai-qin, *et al* (3003)
- Diagnostic value of hs-CRP, PCT and inflammatory factors in neonatal digestive system infectious diseases**  
..... JIANG Yi-gui, CAO Mei-juan, ZHANG Sheng-jun, *et al* (3007)

## Control of infection

- Applying CUSUM-based methods for detection of outbreaks of acute infectious gastroenteritis in health-care facilities**  
..... QIAN Zi-yu, ZHANG Yue-wen, MA Xiao-yue, *et al* (3011)

**Evaluation on the training effect of nosocomial infection control in medical students**

..... LI Jing ,HU Ai-xiang ,ZHANG Yue-wei ,*et al* (3016)

**Application of humanized intervention management combined with feeding posture guidance in the prevention of pulmonary infections in patients with swallowing disorder after stroke**

..... JIANG Yu-jiao , WEN Guo-qiang , HUANG Li (3019)

**Effects of lip-abdominal breathing training and lung function exercise regimens on postoperative pulmonary infections in patients with lung cancer**

..... WANG Guang-jue , PAN Chao , XU Chang , *et al* (3023)

**Effect of interventions on cleaning and disinfection of high-frequency contact surfaces in intensive care unit**

..... WU Rui , XU Si , ZHANG Yan , *et al* (3026)

**Effects of two kinds of cleaning and disinfection methods on digestive endoscope disinfection**

..... WANG Ling , ZHANG Wei , FAN Jing-jing , *et al* (3029)

**SIFIC**

**Epidemiological study and trend analysis of MRSA isolated from inpatients from 2012 to 2017**

..... ZHANG Jing , ZHANG Qi , GENG Jing (3033)

**Prevention and control of water borne infection in medical institutions through outbreak cases**

..... SUN Qing-fen , WANG Guang-fen , HAN Ling-yang , *et al* (3037)

英文审校 成富亮 崔生辉

责任编辑 师维康

中文审校 师维康 杜瑞 冯亚莉

[期刊基本参数]CN11-3456/R \* 1991 \* s \* 16 \* 160 \* zh \* P \* ¥18.00 \* 6000 \* 41 \* 2018-10