



ISSN 1001-5256
CN 22-1108/R
CODEN LGZAEM

临床肝胆病杂志

LINCHUANG GANDANBING ZAZHI

JOURNAL OF CLINICAL HEPATOLOGY

第38卷 第4期 2022年4月

Vol. 38 No. 4 Apr. 2022

www.lcgdbzz.org

- / 百种中国杰出学术期刊
- / 中国精品科技期刊
- / 中国精品科技期刊顶尖学术论文(F5000)项目 来源期刊
- / 《科技期刊世界影响力指数(WJCI)报告》收录期刊
- / 中文核心期刊
- / 中国科技核心期刊
- / RCCSE中国核心学术期刊(A)
- / 荷兰《文摘与引文数据库》(Scopus) 来源期刊
- / 美国《化学文摘(网络版)》(CA) 来源期刊
- / 瑞典《期刊公开获取指南》(DOAJ) 来源期刊
- / 瑞士《健康网络首创研究获取》(HINARI) 来源期刊
- / 俄罗斯《文摘杂志》(AJ, VINITI) 来源期刊
- / 美国《艾博思科数据库》(Eh, EBSCOhost) 来源期刊
- / 英国《国际农业与生物科学研究中心》(CABI) 来源期刊
- / 《日本科学技术振兴机构数据库(中国)》(JSTChina) 来源期刊
- / 世界卫生组织《西太平洋地区医学索引》(WPRIM) 来源期刊
- / 美国《剑桥科学文摘》(CSA) 来源期刊
- / 波兰《哥白尼索引》(IC) 来源期刊
- / 美国《乌利希期刊指南(网络版)》(Ulrichsweb) 注册期刊
- / 《中国学术期刊文摘》数据库(CSAD) 来源期刊
- / 《中国学术期刊影子年报》统计源期刊

ISSN 1001-5256



9 771001 525229



F5000

中华人民共和国教育部主管
吉林大学主办

主 管 : 中华人民共和国教育部
主 办 : 吉林大学
编辑出版 : 《临床肝胆病杂志》编辑部
通信地址 : 吉林省长春市东民主大街 519 号
邮政编码 : 130061
电话号码 : 0431 - 88782542/3542
电子信箱 : lcgdb@vip. 163. com
官方网站 : www. lcgdbzz. org
官方微信 : lcgdbzz1985
官方微博 : http://weibo. com/lcgdbzz

学术支持 : 中华医学会肝病学会

名誉主编 : 庄 辉 谭毓铨

顾 问 : 王红阳 王福生 田志刚
刘允怡 朱 诚 汤钊猷
李兆申 汪忠镐 陈可冀
陈孝平 陈培哲 郑树森
侯云德 赵玉沛 闻玉梅
骆抗先 翁心华 斯崇文
曾民德 董家鸿 窦科峰
樊代明 樊 嘉 黎介寿

主 编 : 贾继东

执行主编 : 牛俊奇

广告经营许可证号 : 2201005030549

印 刷 : 吉林华源印务有限公司

国内发行 : 吉林省报刊发行局

国外发行 : 中国国际图书贸易集团有限公司
(北京 399 信箱,100044)
代号 : M5995

订 购 : 全国各地邮局(所)

邮发代号 : 12 - 80

国内定价 : 60 元/册;720 元/年

中国标准连续出版物号 :

ISSN 1001 - 5256
CN 22 - 1108/R



网站 微信 微博

作者在本刊发表的文章版权
归临床肝胆病杂志编辑部所有

“自身免疫性肝病——识机制进展,促临床提升”重点号

本期执行主编: 闫惠平

目 次

述评

近二十年我国自身免疫性肝病领域发展历程的回顾与展望
..... 闫惠平,刘燕敏,张海萍(737)

专家论坛

自身免疫性肝炎发病机制进展与临床干预新靶点
..... 胡明礼,王绮夏,马雄(743)

重视不典型自身免疫性肝病患者的早诊早治
..... 黄春洋,刘燕敏(748)

病原感染在自身免疫性肝病发生发展中的作用
..... 张海萍,闫惠平,陈德喜,马迎民(754)

后 GWAS 时代的原发性胆汁性胆管炎的遗传学研究
..... 邱方,王婵,张明明,史兴娟,刘向东(759)

IgG4 相关肝胆胰疾病诊疗进展 王天琪,刘燕鹰(762)

指南与规范

人工肝血液净化技术临床应用专家共识(2022 年版)
..... 中华医学会肝病学会重型肝病与人工肝学组(767)

妊娠期急性脂肪肝临床管理指南(2022)
..... 中华医学会妇产科学分会产科学组(776)

《2022 年美国肝病学会实践指南:肝硬化失代偿期的症状管理和
姑息性治疗》摘译 关富,王胜炳,张鸣青(784)

论著

病毒性肝炎

妊娠期 HBV 相关慢加急性肝衰竭的临床特征和转归
..... 纪留娟,梅雪,袁伟,邹颖,刘玉,王介非,钱志平(788)

基因 6 型慢性丙型肝炎的流行病学特征及抗病毒疗效分析
..... 黄锦妮,江建宁,梁丹丹,龙诗雨,董国珍,苏曼,
李继娇,滕春玲,张萍,苏明华(793)

脂肪性肝病

非酒精性脂肪性肝炎新药临床试验方案的系统评价

..... 黄樱硕,魏巍,佟小非,孙亚朦,张健雄,董瑞华,贾继东,尤红(798)

红细胞分布宽度与血小板计数比值评估代谢相关脂肪性肝病及肝硬化的价值分析

..... 白一彤,林连捷,裴冬梅(805)

自身免疫性肝病

中性粒细胞胞外诱捕网在原发性胆汁性胆管炎患者中的作用初步探析

..... 偶绎颜,崔娜娜,李瑶,钱其炜,马雄,尤征瑞,连敏,王绮夏(810)

基线 IgM 水平对原发性胆汁性胆管炎治疗应答的预测价值

..... 韩琳,梁庆升,谢欢,陈英,赵军,张明月,李保森,董艳丽,孙颖(815)

肝纤维化及肝硬化

解毒化痰通腑方对乙型肝炎肝硬化肝胆湿热证患者肠道菌群的影响

..... 刘江凯,牛亚蒙,李素领,马庆亮,张建文,张雅儒,李冰倩(821)

斯特鲁普测试对轻微性肝性脑病的诊断价值 王腾,朱伊静,赵守松(828)

血管内皮间质样转分化遗传示踪小鼠模型的构建及其在肝纤维化研究中的应用

..... 许皓,阮柏,历志文,房志强,王琳,窦科峰(832)

肝脏肿瘤

超米兰标准肝细胞癌肝移植术后复发预测模型的建立

..... 张炜琪,谢炎,陈池义,贺健,谭玉莹,黄亚北,张骊,蒋文涛(837)

炎症标志物对早期小肝癌行射频消融术预后的预测价值

..... 楚伟可,吴雪,张鹏,冯婧,牛斌,周辉,宓余强,李萍(843)

DynaCT 在原发性肝癌患者经肝动脉化疗栓塞术中的指导作用及对疗效的评估价值

..... 杨怀龙,钟唐力(851)

6-姜酮酚抑制肝内胆管癌细胞的增殖、迁移、侵袭作用及其机制探讨

..... 陈泽昊,朱文杰,申兵兵,江建新(857)

益脾养肝方对大鼠肝癌前病变肝干细胞恶性转化的影响和作用机制

..... 鞠迪,李汭,韩曼,房冰莹,闫曙光,李京涛(865)

期刊分析与评价

SCIE 收录的胃肠肝病学期刊发表的中国内地作者的肝脏疾病研究文献计量分析

..... 赵天业,吴燕华,潘禹辰,易嘉欣,吕海永,牛俊奇,姜晶(872)

病例报告

抗-HAV-IgM 阳性的自身免疫性肝炎-原发性胆汁性胆管炎重叠综合征 1 例报告

..... 何艳莎,刘华宝,宋翊,陈新瑜,饶春燕(878)

局部栓塞联合靶向免疫综合治疗肝肉瘤样癌 1 例报告 雷进,张林枝,陆荫英,陈博文,左石(880)

以肝损害为主要表现的嗜酸粒细胞增多症 1 例报告 吴昊,郑欣,朱磊,杨冬(883)

长期孤立性巨天冬氨酸转氨酶升高 1 例报告 李东泽,屈蒙蒙,游绍莉,吕飒(886)

遗传性球形红细胞增多症合并 Gilbert 综合征 1 例报告 张玉姣,郑英,王秀红,蔡颖,马安林(888)

肝移植术后自发性肝破裂出血 1 例报告 马健,何力宏,王凌云,翟亚楠,李汛,张磊(891)

II 型胆囊穿孔致肝脓肿 3 例报告并文献复习 任少雄,梁泽,韩景钊,脱红芳,彭彦辉(894)

综述

数字疗法在非酒精性脂肪性肝病治疗中的应用 孙超,范建高(898)

虎杖活性成分治疗非酒精性脂肪性肝病的相关信号通路及相互作用

..... 李淑娣,陈欣菊,刘江凯,王振,段飞,袁卓雅,梁磊,李素颖(902)

新型微创技术在指导自身免疫性肝炎诊疗中的作用

..... 刘怀鄂,钱建丹,张驰,刘艺琪,李志,赵鸿,王贵强(908)

对熊去氧胆酸应答不佳或不耐受的原发性胆汁性胆管炎患者应用奥贝胆酸和贝特类药物治疗的

研究进展 帅俊芳,韩子岩(913)

附脐静脉开放对肝硬化食管静脉曲张发生及出血的影响:保护因素还是危险因素?

..... 陈智鹏,尹芳(918)

早期肝癌微创诊断之匙——循环游离 DNA 联合型液体活检 叶婷丹,雷学忠(923)

PM2.5 在肝癌发生发展中的作用 左飞,李国东,刘明(927)

新型冠状病毒肺炎相关肝损伤研究进展 崔浩,梁静,向慧玲(931)

人血白蛋白在终末期肝病中的应用 杨榕,熊晔,黄建荣(936)

核苷酸结合寡聚化结构域样受体蛋白 3 炎性小体在肝脏疾病中的作用机制

..... 杨燕,葛斐林,黄倩,张馨月,曾锐,肖小河,柏兆方,孙琴(942)

肠道菌群及其代谢物在胆囊胆固醇结石形成中的作用机制 赵瀚东,高鹏,詹丽(947)

铁死亡在胆管癌中的作用机制 杨铭钰,杨震,任万华(951)
胰腺外分泌功能检测方法的临床应用 左林,杨都江,陆慧敏(956)
微小 RNA - 200c 在胰腺癌中的研究进展 张尧,张锴,康鹏东,马超(961)
胰腺癌肿瘤微环境的机制及靶向治疗 张艺译,徐敏(965)

国内外会议动态

会议通知|2022 年亚太肝病学会肝纤维化专题会 (836)

国外期刊精品文章简介

Developmental Cell | 通过单细胞转录组学对出生后肝脏发育和成熟的时间分析 (856)
Journal of Hepatology | 扑热息痛过量可阻断肝细胞摄取胆汁酸从而减轻肝毒性 (890)
Hepatology International | HBV 相关慢加急性肝衰竭合并细菌感染患者预后模型的建立和验证 ... (901)

消息

《临床肝胆病杂志》对基金项目论文开通“绿色通道” (742)
《临床肝胆病杂志》2022 年 1 - 12 期重点号选题及各期执行主编 (787)

志谢

本期审稿专家 (792)

本刊稿约见 2022 年第 38 卷第 1 期第 247 页

责任编辑:刘晓红 葛俊

统计学编辑:刘晓红

CN22 - 1108/R * 1985 * m * 16 * 240 * zh * P * ¥ 60.00 * 4000 * 46 * 2022 - 04 * n

Supervisor

Ministry of Education of the People's
Republic of China

Sponsor

Jilin University

Editing & Publishing

Editorial Board of Journal of Clinical Hepatology
Common. Add: 519 Dongminzhu Road,
Changchun, China
Post Code: 130061
Tel: 86 -431 -88782542; 86 -431 -88783542
E-mail: lcgdb@vip.163.com
http://www.lcgdbzz.org

Academic Support

Chinese Society of Hepatology,
Chinese Medical Association

Honorary Editors –in –Chief

ZHUANG Hui, TAN Yuquan

Consultants

WANG Hongyang, WANG Fusheng,
TIAN Zhigang, LIU Yunyi, ZHU Cheng,
TANG Zhaoyou, LI Zhaoshen, WANG Zhonggao,
CHEN Keji, CHEN Xiaoping, CHEN Peizhe,
ZHENG Shusen, HOU Yunde, ZHAO Yupei,
WEN Yumei, LUO Kangxian, WENG Xinhua,
SI Chongwen, ZENG Minde, DONG Jiahong,
DOU Kefeng, FAN Daiming, FAN Jia, LI Jieshou

Editor – in –Chief

JIA Jidong

Executive Deputy Chief Editor

NIU Junqi

The Advertising Business License

2201005030549

Printing Unit

Jilin Huayuan Printing Co., Ltd.

Issuing Scope

Public issue

Overseas Distributor

China International Book Trading Corporation
P. O. Box 399, Beijing 100044, China
Code No. M5995
Dewey #: 616.362; CODEN LGZAEM
Send by mail cod No. : 5995M
CNY 60/Copy, CNY 720/Year

**Copyright @ by the Journal of
Clinical Hepatology**

**Theme Issue: Autoimmune Liver Diseases—Exploring the Pathogenesis
and Promoting Clinical Practice**

Executive Chief Editor: YAN Huiping

Contents

Editorial

Review and prospect of the development in the field of autoimmune liver
diseases in China over the last 20 years (737)
YAN Huiping, LIU Yanmin, ZHANG Haiping

Discussions by Experts

Advances in the pathogenesis of autoimmune hepatitis and new targets for
clinical intervention (743)
HU Mingli, WANG Qixia, MA Xiong

The early diagnosis and treatment of atypical autoimmune liver disease
should be taken seriously (748)
HUANG Chunyang, LIU Yanmin

The role of pathogen infections in the development and progression of
autoimmune liver diseases (754)
ZHANG Haiping, YAN Huiping, CHEN Dexi, MA Yingmin

Genetic studies of primary biliary cholangitis in the post –GWAS era (759)
QIU Fang, WANG Chan, ZHANG Mingming, SHI Xingjuan, LIU Xiangdong

Advances in diagnosis and treatment of IgG4 –related hepatobiliary and
pancreatic diseases (762)
WANG Tianqi, LIU Yanying

Guidelines

Expert consensus on clinical application of artificial liver and blood
purification (2022 edition) (767)
*Severe Liver Disease and Artificial Liver Group, Chinese Society of Hepatology,
Chinese Medical Association*

Clinical management guidelines for acute fatty liver of pregnancy in
China (2022) (776)
Obstetrics Subgroup, Chinese Society of Obstetrics and Gynecology, Chinese Medical Association

An excerpt of AASLD practice guidance: Palliative care and symptom –based
management in decompensated cirrhosis (2022) (784)
GUAN Fu, WANG Shengbing, ZHANG Mingqing

Original Articles

Viral Hepatitis

Clinical features and prognosis of HBV – related acute – on – chronic liver failure in pregnancy (788)
Ji Liujuan, MEI Xue, YUAN Wei, ZOU Ying, LIU Yu, WANG Jiefei, QIAN Zhiping

Epidemiological features and antiviral response of genotype 6 chronic hepatitis C (793)
HUANG Jimi, JIANG Jianming, LIANG Dandan, LONG Shiyu, DONG Guozhen, SU Man, LI Jijiao, TENG Chunling, ZHANG Ping, SU Minghua

Fatty Liver Diseases

Clinical trial protocols of new drugs for nonalcoholic steatohepatitis: A systematic review (798)
HUANG Yingshuo, WEI Wei, TONG Xiaofei, SUN Yameng, ZHANG Jianxiong, DONG Ruihua, JIA Jidong, YOU Hong

Value of red blood cell distribution width – to – platelet ratio in evaluating metabolic – associated fatty liver disease and liver cirrhosis (805)
BAI Yitong, LIN Lianjie, PEI Dongmei

Autoimmune Liver Diseases

A preliminary study of the role of neutrophil extracellular traps in patients with primary biliary cholangitis (810)
OU Yiyuan, CUI Nana, LI Yao, QIAN Qiwei, MA Xiong, YOU Zhengrui, LIAN Min, WANG Qixia

Value of baseline IgM level in predicting the treatment response of primary biliary cholangitis (815)
HAN Lin, LIANG Qingsheng, XIE Huan, CHEN Ying, ZHAO Jun, ZHANG Mingyue, LI Baosen, DONG Yanli, SUN Ying

Liver Fibrosis and Liver Cirrhosis

Effect of Jiedu Huayu Tongfu prescription on intestinal flora in patients with hepatitis B cirrhosis with liver – gallbladder damp – heat syndrome (821)
LIU Jiangkai, NIU Yameng, LI Suling, MA Qingliang, ZHANG Jiangwen, ZHANG Yaru, LI Bingqian

Value of Stroop test in the diagnosis of minimal hepatic encephalopathy (828)
WANG Teng, ZHU Yijing, ZHAO Shousong

Establishment of a mouse model of vascular endothelial – mesenchymal transdifferentiation genetic tracing and its role in liver fibrosis studies (832)
XU Hao, RUAN Bai, LI Zhiwen, FANG Zhiqiang, WANG Lin, DOU Kefeng

Liver Neoplasms

Development of a new model for predicting recurrence after liver transplantation for hepatocellular carcinoma beyond Milan criteria (837)
ZHANG Weiqi, XIE Yan, CHEN Chiyi, HE Jian, TAN Yuying, HUANG Yabei, ZHANG Li, JIANG Wentao

Value of inflammatory biomarkers in predicting the prognosis of early small hepatocellular carcinoma after radiofrequency ablation (843)
CHU Weike, WU Xue, ZHANG Peng, FENG Jing, NIU Bin, ZHOU Hui, MI Yuqiang, LI Ping

Guiding role of cone beam CT with DynaCT in transcatheter arterial chemoembolization for patients with primary liver cancer and its value in assessing treatment outcome (851)
YANG Huailong, ZHONG Tangli

Inhibitory effect of 6 – paradol on the proliferation, migration, and invasion of intrahepatic cholangiocarcinoma cells and its mechanism (857)
CHEN Zehao, ZHU Wenjie, SHEN Bingbing, JIANG Jianxin

Effect of Yipi Yanggan prescription on malignant transformation of liver stem cells in rats with liver precancerous lesion and its mechanism of action (865)
JU Di, LI Mi, HAN Man, FANG Bingying, YAN Shuguang, LI Jingtao

Analysis and Evaluation on Journal

- A bibliometric analysis of liver disease research articles published by Chinese mainland authors in Gastroenterology & Hepatology journals indexed in Science Citation Index Expanded (872)
ZHAO Tianye, WU Yanhua, PAN Yuchen, YI Jiaxin, LYU Haiyong, NIU Junqi, JIANG Jing

Case Reports

- A case of anti – HAV – IgM – positive AIH – PBC overlap syndrome (878)
HE Yansha, LIU Huabao, SONG Yi, CHEN Xinyu, RAO Chunyan
- Local embolization combined with targeted comprehensive immunotherapy in treatment of sarcomatoid hepatocellular carcinoma: A case report (880)
LEI Jin, ZHANG Linzhi, LU Yinying, CHEN Bowen, ZUO Shi
- A case of eosinophilia mainly manifesting as liver injury (883)
WU Hao, ZHENG Xin, ZHU Lei, YANG Dong
- Long – term isolated macro – aspartate aminotransferase elevation: A case report (886)
LI Dongze, QU Mengmeng, YOU Shaoli, LYU Sa
- Hereditary spherocytosis coexisting with Gilbert’s syndrome: A case report (888)
ZHANG Yujiao, ZHENG Ying, WANG Xiuhong, CAI Ying, MA Anlin
- A case of spontaneous hepatic rupture and hemorrhage after liver transplantation (891)
MA Jian, HE Lihong, WANG Lingyun, ZHAI Yanan, LI Xun, ZHANG Lei
- Liver abscess caused by type II gallbladder perforation: A report of 3 cases and literature review (894)
REN Shaoxiang, LIANG Ze, HAN Jingzhao, TUO Hongfang, PENG Yanhui

Reviews

- Application of digital therapeutics in the treatment of nonalcoholic fatty liver disease (898)
SUN Chao, FAN Jiagao
- Signaling pathways involved in the active components of Polygonum cuspidatum in treatment of nonalcoholic fatty liver disease and their interaction (902)
LI Shudi, CHEN Xinju, LIU Jiangkai, WANG Zhen, DUAN Fei, YUAN Zhuoya, LIANG Lei, LI Suling
- Role of new noninvasive methods in guiding the diagnosis and treatment of autoimmune hepatitis (908)
LIU Huaie, QIAN Jiandan, ZHANG Chi, LIU Yiqi, LI Zhi, ZHAO Hong, WANG Guiqiang
- Research advances in obeticholic acid and fibrates in treatment of primary biliary cholangitis with poor response or intolerance to ursodeoxycholic acid (913)
SHUAI Junfang, HAN Ziyang
- Influence of patent paraumbilical vein on the development of esophageal varices and esophageal variceal bleeding in liver cirrhosis: A protective factor or a risk factor? (918)
CHEN Zhipeng, YIN Fang
- Circulating cell – free DNA – combined liquid biopsy: The key to noninvasive diagnosis of early – stage liver cancer (923)
YE Tingdan, LEI Xuezhong
- Role of particulate matter 2.5 in the development and progression of liver cancer (927)
ZUO Fei, LI Guodong, LIU Ming

Research advances in coronavirus disease 2019 – related liver injury	(931)
<i>CUI Hao, LIANG Jing, XIANG Huiling</i>	
Application of human serum albumin in the management of end – stage liver disease	(936)
<i>YANG Lu, XIONG Ye, HUANG Jianrong</i>	
Mechanism of action of nucleotide – binding oligomerization domain – like receptor protein 3 inflammasome in liver diseases	(942)
<i>YANG Yan, GE Feilin, HUANG Qian, ZHANG Xinyue, ZENG Rui, XIAO Xiaohu, BAI Zhaofang, SUN Qin</i>	
The mechanism of intestinal flora and its metabolites in the formation of cholesterol gallstones	(947)
<i>ZHAO Handong, GAO Peng, ZHAN Li</i>	
Mechanism of action of ferroptosis in cholangiocarcinoma	(951)
<i>YANG Mingyu, YANG Zhen, REN Wanhua</i>	
Clinical application of pancreatic exocrine function tests	(956)
<i>ZUO Lin, YANG Dujiang, LU Huimin</i>	
Research advances in microRNA – 200c in pancreatic cancer	(961)
<i>ZHANG Yao, ZHANG Kai, KANG Pengdong, MA Chao</i>	
Research advances in the mechanism of tumor microenvironment in pancreatic cancer and related targeted therapy	(965)
<i>ZHANG Yiyi, XU Min</i>	

Conference Trends at Home and Abroad

APASL STC 2022: Liver fibrosis in the era of translational medicine	(836)
---	-------

Introduction of High – quality Articles in Foreign Journals

<i>Developmental Cell</i> Temporal analyses of postnatal liver development and maturation by single – cell transcriptomics	(856)
<i>Journal of Hepatology</i> Interruption of bile acid uptake by hepatocytes after acetaminophen overdose ameliorates hepatotoxicity	(890)
<i>Hepatology International</i> Establishment and validation of a prognostic model for hepatitis B virus – related acute – on – chronic liver failure patients with bacterial infection	(901)

Thanks

Current reviewers	(792)
-------------------------	-------