

中国医学影像技术

ZHONGGUO YIXUE YINGXIANG JISHU

月刊 1985 年创刊 第 38 卷 第 8 期 2022 年 8 月 20 日出版

主 管 中国科学院
主 办 中国科学院声学研究所
名誉主编
刘玉清 唐孝威 王威琪
主 编 李坤成 李建初

副主编
陈 涛 冯 逢 何 文
李亚明 任卫东 孙应实
田家玮 王培军 王小民
王振常 吴青青 伍建林
谢明星 余永强 郑海荣

社 长 郑春见

总编辑 王艳萍

编辑出版

《中国医学影像技术》期刊社
有限公司

印 刷 北京科信印刷有限公司

发 行

国内:中国邮政集团公司

北京市报刊发行局

国外:中国国际图书贸易集团
有限公司

北京 399 信箱,100048

代号:M1344

订 购

全国各地邮局

邮发代号 82-509

邮 购

100190 北京市海淀区北四环

西路 21 号大猷楼 502 室

电话、传真:(86-10)82547903

定 价

每册 26 元 全年 312 元

中国标准连续出版物号

ISSN 1003-3289

CN 11-1881/R

广告发布登记

京海市监广登字 20200042 号

网 址 www.cjmit.com

E-mail cjmit@mail.ioa.ac.cn

2022 年版权归《中国医学影像技术》
期刊社有限公司所有

目 次

实验研究

7.0T MR T2* mapping 与 T2 mapping 检测急性心肌梗死再灌注模型大鼠心肌内出血
…………… 夏 睿,何 博,陈榆舒,王 磊,廖继春,李咏梅,吕发金,郜发宝(1121)

超声联合微泡选择性破坏小鼠腹主动脉不稳定斑块内不成熟血管
…………… 郭胜存,张胜叶,户富栋,陈 熙,陈 魁(1127)

中枢神经影像学

急性脑出血“动态点征”区域 CT 灌注参数定量评估血肿扩大
…………… 王晓晨,王思慧,赵雪宁,孙胜军(1134)

全肿瘤弥散峰度成像直方图分析预测脑膜瘤分级及细胞增殖活性
…………… 陈晓丹,郑德春,陈兴发,林孔起,何庄贞,苏丽清,陈韵彬,林 霖,薛蕴菁(1139)

高分辨率 MRI 分析基底动脉几何形态与其动脉粥样硬化斑块的相关性
…………… 刘昱琳,刘红军,李品雄,朱 超,吴咪咪,陈明蕾,叶蕴锐,刘再毅,梁长虹(1145)

基于静息态功能 MRI 低频振幅评价慢性腰痛患者脑功能活动性别差异
…………… 霍 苗,陈义磊,詹松华,谭文莉(1151)

全脑 CT 灌注成像诊断小体积急性脑梗死及其评估病灶体积与弥散加权成像的相关性
…………… 赵 松,张智琴,刘 岩,何业举,季 光,刘 丹(1157)

头颈部影像学

最小表观弥散系数(ADC)值鉴别诊断腮腺肿块…………… 杨 静,李新瑜,詹浩辉(1162)

心脏、血管影像学

心肺超声评估脓毒症休克合并心肌功能障碍患者肺水肿
…………… 赵浩天,任 珊,龙 玲,燕亚茹,申丽旻,赵鹤龄(1166)

高分辨率超声测量动脉内膜厚度的影响因素及其诊断冠心病的价值
…………… 林培鑫,万晓钰,徐铭俊,张 瑜,张 运,张 梅(1172)

胸部影像学

自动乳腺全容积扫描冠状面所见联合肿瘤标记物评估乳腺癌腋窝淋巴结转移
…………… 刘 韬,陈庭威,严宝妹,杨慧慧,梁伟翔(1177)

联合含瘤周肿瘤全体积 CT 影像组学特征及临床相关独立预测因子列线图预测
肺腺癌淋巴血管侵犯
…………… 陈巧玲,冯 峰,李曼曼,薛 婷,彭 慧,石 健,朱兴华,段绍峰(1181)

细支气管腺瘤临床、CT 及病理学表现
…………… 邓燕芳,范明华,谢丽卿,赖发明,林 祺(1187)

腹部影像学

经腹肠道超声诊断克罗恩病合并肠瘘及肠腔狭窄
…………… 颜丽华,骆小冬,刘 志,张妍琰,覃 辉,陈烁淳,李颖嘉(1192)

CT 影像组学预测肾透明细胞癌病理分级:Meta 分析	曹新玥,朱美霖,印隆林,刘一铭,吴 颖(1197)
经 T 管超声胆管造影评估肝移植术后早期肝内外胆管	吴晓冬,刘 松,王 峰,张 勇,蔡金贞,王建红(1203)
妇产科学影像学	
声触诊弹性成像技术量化评估孕晚期妊娠糖尿病患者胎盘弹性	壮 健,李晓琴,张 超,朱韦文,于梦霞(1208)
MRI 评估宫颈癌子宫根治术后患者肛提肌长期变化	卢逸嘉,陈春林,刘云鹭,黄 璐,冯 婕,刘 萍(1213)
心脏纵隔移位角用于预测肺部肿块胎儿围产期不良结局	德文洁,胡 蓉,周慧丽,曾倩倩(1218)
生殖泌尿影像学	
超声标记肾脏体表投影测量肾脏移动度	龚凤玲,赵国政,李 利,孙 斌,李 迪,孙 安,刘淑萍(1223)
骨骼肌肉影像学	
肩胛舌骨肌及其伴行神经超声表现	胡秀青,姜 辉,施晓琳,鄂占森(1227)
医学物理与工程学	
多参数结构脑网络融合技术诊断双相障碍	杨若楠,郭 敏,于雪雪,罗世杰,李丹丹,王 彬,相 洁,牛 焱(1232)
影像技术学	
乳腺局灶异常平扫锥形束乳腺 CT 表现及其诊断价值	赵 欣,康 巍,苏丹柯,金观桥,刘丽东,郑仲涛,刘 宇(1238)
重建算法及参数对 SPECT 颞颌关节显像髌突代谢活性的影响	李文宇,沈美娟,江凌龙,徐 超,文 兵,汪长银(1243)
3.0T MR 体素内不相干运动成像、弥散张量成像及 T1 mapping 检测健康成年人肾功能	斯 艺,杨 玲,姚 晋(1249)
综述	
磁敏感加权成像用于诊断及治疗胶质瘤研究进展	曾文婷,赵 静,初建平(1254)
“黑骨”MRI 研究儿童颅缝早闭进展	丁楚涵,边传振,卞宪平(1259)
MRI 及超声评估子宫腺肌病患者子宫内膜-肌层交界区研究进展	卢 佳,胡 兵,李 欢(1262)
高分辨 MR 血管壁成像用于颅内动脉粥样硬化疾病研究进展	乔 晨,宋清伟,王 峰(1266)
个案报道	
超声引导下蛛网膜下腔注射诺西那生钠治疗脊髓性肌萎缩症 1 例	李君晴,曾祥刚,宋 涛,李文谦(1171)
产前超声检出先天性颗粒细胞牙龈瘤 1 胎	张乾泉,彭丽珊(1191)
¹⁸ F-FDG PET/CT 诊断腰椎血管肉瘤 1 例	付忠义,支 全,闫清清,卢 俊,刘 磊(1212)
膝关节透明细胞肉瘤超声表现 1 例	史 策,勇言杰(1217)
儿童腹腔多囊性间皮瘤疝入阴囊 1 例	张旭霞,孙碧霞,邓 林(1222)
1 例右手透明细胞肉瘤超声表现	曹 燧(1231)
儿童颅内上皮样肉瘤 1 例	石建功,杨 青(1270)
右肾上腺富细胞性神经鞘瘤 1 例	徐凯旋,李晓宇,王 畅,刘雅茹,金光玉(1271)
十二指肠-空肠憩室合并异位胰腺出血 1 例	高聪聪,马晓璇(1272)
直肠原发性组织细胞肉瘤 1 例	蒋赵娟,张大福,李振辉,高德培(1273)
继发性甲状旁腺功能亢进伴纵隔异位甲状旁腺瘤 1 例	张红征,戴 生,王 超(1275)
超声诊断子宫绒毛膜癌破裂出血伴宫旁及肺转移 1 例	汪 彤,王海燕,王佳星,祁 兵,王 文,王福霞(1277)
甲状腺腺瘤核素显像呈“冷结节”并 MIBI 摄取阳性 1 例	胥建国,郝宏毅,梁 瑞,肖红燕,杨 勇(1279)
本期执行主编	伍建林 田家玮
本期执行编委	闫清淳
本期责任编辑	冯 洁 本期校对 徐 悦

CHINESE JOURNAL OF MEDICAL IMAGING TECHNOLOGY

Monthly Established in 1985 Vol 38, No 8 Aug 20, 2022

Responsible Institution

Chinese Academy of Sciences

Sponsor

Institute of Acoustics,
Chinese Academy of Sciences

Honorary Editor

LIU Yuqing TANG Xiaowei
WANG Weiqi

Editor-in-Chief

LI Kuncheng LI Jianchu

Associate Editor

CHEN Tao FENG Feng HE Wen
LI Yaming REN Weidong
SUN Yingshi TIAN Jiawei
WANG Peijun WANG Xiaomin
WANG Zhenchang WU Qingting
WU Jianlin XIE Mingxing
YU Yongqiang ZHENG Hairong

President

ZHENG Chunjian

Chief Editor

WANG Yanping

Editing and Publishing

Press of Chinese Journal of Medical
Imaging Technology Co., Ltd

Printing

Beijing Kexin Printing Co., Ltd

Overseas Distributor

China International Book Trading
Corporation
P. O. Box 399, Beijing 100048, China
Code No. M1344

Mail Order

Room 502, Da-you Building,
No. 21, North 4th Ring West Road,
Haidian District, Beijing 100190, China
Tel, Fax: (86-10) 82547903

Price (Foreign)

USD \$ 26.00

CSSN ISSN 1003-3289
CN 11-1881/R

Website

www.cjmit.com

E-mail

cjmit@mail.ioa.ac.cn

Copyright©2022 by the Press of
Chinese Journal of Medical Imaging
Technology Co., Ltd

Contents in Brief

Experimental Study

7. 0T MR T2* mapping and T2 mapping for detecting intramyocardial hemorrhage in acute myocardial infarction reperfusion rat models (1121)

XIA Rui, HE Bo, CHEN Yushu, WANG Lei, LIAO Jichun, LI Yongmei, LYU Fajin, GAO Fabao

Ultrasound combined with microbubbles for selective destruction of immature vessels in abdominal aortic unstable plaque of mice (1127)

GUO Shengcun, ZHANG Shengye, HU Fudong, CHEN Xi, CHEN Kui

Neuroimaging

CT perfusion parameters in "dynamic spot sign" region of acute intracerebral hemorrhage for quantitative assessment of hematoma expansion (1134)

WANG Xiaochen, WANG Sihui, ZHAO Xuening, SUN Shengjun

Whole-tumor histogram analysis of diffusion kurtosis imaging for predicting grade and proliferation activity of meningioma (1139)

CHEN Xiaodan, ZHENG Dechun, CHEN Xingfa, LIN Kongqi, HE Zhuangzhen, SU Liqing, CHEN Yunbin, LIN Lin, XUE Yunjing

High-resolution MRI for analysis of relationship between geometry of basilar artery and atherosclerotic plaque (1145)

LIU Yulin, LIU Hongjun, LI Pinxiong, ZHU Chao, WU Mimi, CHEN Minglei, YE Yunrui, LIU Zaiyi, LIANG Changhong

Evaluation on gender differences of brain functional activity in chronic low back pain patients based on low frequency amplitude of resting-state functional MRI (1151)

HUO Miao, CHEN Yilei, ZHAN Songhua, TAN Wenli

Whole-brain CT perfusion imaging for diagnosing small-volume acute cerebral infarction and evaluation on lesion volume: Correlation with diffusion weighted imaging (1157)

ZHAO Song, ZHANG Zhiqin, LIU Yan, HE Yeju, JI Guang, LIU Dan

Head and Neck Imaging

The minimum apparent diffusion coefficient (ADC) value for differential diagnosis of parotid masses (1162)

YANG Jing, LI Xinyu, ZHAN Haohui

Heart and Vascular Imaging

Cardiopulmonary ultrasound in evaluating pulmonary edema in patients with septic shock complicated with myocardial dysfunction (1166)

ZHAO Haotian, REN Shan, LONG Ling, YAN Yaru, SHEN Limin, ZHAO Heling

Intima thickness evaluated with high resolution ultrasound: Impact factors and value for diagnosing coronary heart disease (1172)

LIN Peixin, WAN Xiaoyu, XU Mingjun, ZHANG Yu, ZHANG Yun, ZHANG Mei

Chest Imaging

Automatic breast volume scanner (ABVS) coronal signs combined with tumor indicators for evaluation on axillary lymph node metastasis of breast cancer (1177)

LIU Tao, CHEN Tingwei, YAN Baomei, YANG Huihui, LIANG Weixiang

Nomogram based on CT radiomics features of gross peritumoral tumor volume and clinical relevant independent predictors for predicting lymphovascular invasion of lung adenocarcinoma (1181)

CHEN Qiaoling, FENG Feng, LI Manman, XUE Ting, PENG Hui, SHI Jian, ZHU Xinghua, DUAN Shaofeng

Clinical, CT and pathological manifestations of bronchiolar adenoma (1187)

DENG Yanfang, FAN Minghua, XIE Liqing, LAI Faming, LIN Qi

Abdominal Imaging

Transabdominal intestinal ultrasonography for diagnosing Crohn disease complicated with intestinal fistula and intestinal stenosis (1192)

YAN Lihua, LUO Xiaodong, LIU Zhi, ZHANG Yanyan, QIN Hui, CHEN Shuochun, LI Yingjia

CT radiomics for predicting pathological grade of renal clear cell carcinoma: Meta-analysis (1197)

CAO Xinyue, ZHU Meilin, YIN Longlin, LIU Yiming, WU Ying

T-tube contrast-enhanced ultrasonic cholangiography for early evaluation of intrahepatic and extrahepatic bile ducts after liver transplantation (1203)

WU Xiaodong, LIU Song, WANG Feng, ZHANG Yong, CAI Jinzhen, WANG Jianhong

Obstetrical and Gynecological Imaging

- Sound touch elastography technique for quantification of placental elasticity in patients with late pregnancy gestational diabetes mellitus (1208)
ZHUANG Jian, LI Xiaoqin, ZHANG Chao, ZHU Weixen, YU Mengxia
- MRI for evaluation on long-term changes of levator ani muscle in cervical cancer patients after radical hysterectomy (1213)
LU Yijia, CHEN Chunlin, LIU Yunlu, HUANG Lu, FENG Jie, LIU Ping
- Cardiomediastinal shift angle for predicting perinatal adverse outcomes of fetus with pulmonary mass (1218)
DE Wenjie, HU Rong, ZHOU Huili, ZENG Qianqian

Genitourinary Imaging

- Measuring renal mobility based on ultrasound labeled renal surface projection (1223)
GONG Fengling, ZHAO Guozheng, LI Li, SUN Bin, LI Di, SUN An, LIU Shuping

Musculoskeletal Imaging

- Ultrasonic manifestations of omohyoid muscle and the accompanying nerves (1227)
HU Xiuqing, JIANG Hui, SHI Xiaolin, E Zhansen

Imaging Physics and Engineering

- Multi-parameter structural brain network fusion in diagnosis of bipolar disorder (1232)
YANG Ruonan, GUO Min, YU Xuexue, LUO Shijie, LI Dandan, WANG Bin, XIANG Jie, NIU Yan

Imaging Technology

- Findings and diagnostic value of plain cone beam breast CT of breast focal abnormalities (1238)
ZHAO Xin, KANG Wei, SU Danke, JIN Guangqiao, LIU Lidong, ZHENG Zhongtao, LIU Yu
- Condyle metabolic activity on SPECT of temporomandibular joint imaging with different reconstruction algorithms and parameters (1243)
LI Wenyu, SHEN Meijuan, JIANG Linglong, XU Chao, WEN Bing, WANG Changyin
- 3.0T MR intravoxel incoherent motion imaging, diffusion tensor imaging and T1 mapping for evaluating renal function in healthy adults (1249)
SI Yi, YANG Ling, YAO Jin

Reviews

- Research progresses of susceptibility weighted imaging for diagnosis and treatment of glioma (1254)
ZENG Wenting, ZHAO Jing, CHU Jianping
- Progresses of "black bone" MRI in children with craniosynostosis (1259)
DING Chuhan, BIAN Chuanzhen, BIAN Chongping
- Research progresses of MRI and ultrasound for evaluating endometrial-myometrial interface of adenomyosis patients (1262)
LU Jia, HU Bing, LI Huan
- Research progresses of high-resolution magnetic resonance vessel wall imaging for intracranial atherosclerotic disease (1266)
QIAO Chen, SONG Qingwei, WANG Feng

Case Reports

- Ultrasound-guided subarachnoid space injection of nusinersen sodium for treating spinal muscular atrophy: Case report (1171)
LI Junqing, ZENG Xianggang, SONG Tao, LI Wenqian
- Prenatal ultrasonic detection of fetus congenital granular cell epulis: Case report (1191)
ZHANG Qianquan, PENG Lishan
- ¹⁸F-FDG PET/CT diagnosis of lumbar vertebra hemangiosarcoma: Case report (1212)
FU Zhongyi, ZHI Quan, YAN Qingqing, LU Jun, LIU Lei
- Ultrasonic manifestations of knee joint clear cell sarcoma: Case report (1217)
SHI Ce, YONG Yanjie
- Abdominal polycystic mesothelioma herniating into scrotum in a child: Case report (1222)
ZHANG Xuxia, SUN Bixia, DENG Lin
- Ultrasonic manifestations of clear cell sarcoma of the right hand: Case report (1231)
CAO Yi
- Intracranial epithelial sarcoma in a child: Case report (1270)
SHI Jiangong, YANG Qing
- Cellular neurilemmoma of right adrenal gland: Case report (1271)
XU Kaixuan, LI Xiaoyu, WANG Chang, LIU Yaru, JIN Guangyu
- Duodenal-jejunal diverticulum complicated with hemorrhage of heterotopic pancreas: Case report (1272)
GAO Congcong, MA Xiaoxuan
- Primary rectal histiocytic sarcoma: Case report (1273)
JIANG Zhaojuan, ZHANG Dafu, LI Zhenhui, GAO Depei
- Secondary hyperparathyroidism complicated with mediastinum ectopic parathyroid adenoma: Case report (1275)
ZHANG Hongzheng, DAI Sheng, WANG Chao
- Ultrasonic diagnosis of rupture and bleeding of uterine choriocarcinoma with parauterine and lung metastases: Case report (1277)
WANG Tong, WANG Haiyan, WANG Jiaxing, QI Bing, WANG Wen, WANG Fuxia
- Thyroid adenoma manifested as cold nodule on nuclide imaging and positive MIBI uptake: Case report (1279)
XU Jianguo, HAO Hongyi, LIANG Rui, XIAO Hongyan, YANG Yong