

中国医学影像技术

ZHONGGUO YIXUE YINGXIANG JISHU

月刊 1985 年创刊 第 41 卷 第 3 期 2025 年 3 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

主编

洪楠 李建初

副主编

陈涛 崔立刚 冯逢

何文 李风华 李亚明

卢洁 任卫东 孙应实

田家玮 王培军 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:中国邮政集团有限公司

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

网址 www.cjmit.com

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

2025 年版权归《中国医学影像技术》

期刊社有限公司所有

目次

规范与标准

影像学诊断神经型布鲁氏菌病专家共识 中华医学会放射学分会传染病学组,
中国研究型医院学会感染与炎症放射学专业委员会,中国艾滋病性病防治协会
艾滋病放射学专业委员会,中国科技产业化促进会数字健康专业委员会,
北京影像诊疗技术创新联盟,张译微,赵玲玲,郭辉,李宏军(353)

述评

胎儿神经学超声检查新进展 孙丽娟,吴青青(359)

专论

胎儿脑皮质发育畸形产前超声表现
..... 郭翠霞,孙丽娟,刘妍,张铁娟,王莉,韩吉晶,吴青青(363)

产前三维超声联合微血流成像诊断胎儿颅脑畸形
..... 崔元杰,郭翠霞,李贞,张娟,张铁娟,王克扬,吴青青,吴玉婷,孙丽娟(368)

产前超声诊断胎儿颅内蛛网膜囊肿并预测其转归
..... 张国慧,孙丽娟,郭翠霞,崔元杰(372)

影像学产前评估胎儿脑皮质发育畸形研究进展
..... 张思敏,盛长青,张喻,张春燕,杨晓雪,满媛媛,蔡莹莹,闫锐,高新茹(377)

产前超声误诊胎儿脑皮质发育畸形为侧脑室扩张 1 例 何碧媛,周毓青(382)

实验研究

微波消融离体猪肺血管热沉效应的影响因素 陈泽南,张忠亮,王思斌,郭新垣,
张晶,张啸波,何晓锋,孟亮亮,张欣,魏颖恬,肖越勇,南群,张肖(383)

中枢神经影像学

不同分期帕金森病脑网络动态功能连接改变
..... 刘沁茹,唐玉清,谭长连,李旭,牛亚平,黄聪丽,廖海燕(389)

T1WI 深度学习模型评估新生儿高胆红素血症脑损伤
..... 崔静威,牛永超,谢北辰,刘畅,段金辉,薛芹,闫瑞芳(394)

非小细胞肺癌患者内侧前额叶皮质代谢物水平与肿瘤相关抑郁的相关性
..... 兰金辉,李鹏强,任虎玲,王彦斐,王婧,张艳利,朱翊,窦郁(399)

可逆性后部脑病综合征病理生理学机制
..... 金鑫,王燕,刘斯平,王志兵,张志强(404)

头颈部影像学

对比通义千问 2.5 与 GPT-4o 模型生成的甲状腺超声结构化报告
..... 秦赛梅,文琼,段依恋,项飞翔(409)

心脏、血管影像学

进行性假肥大性肌营养不良患儿左心房心肌应变与左心室功能的相关性 冯 洋, 谌嘉琪, 樊 利, 夏嘉敏, 尹春梅, 杨春江(414)

多层螺旋 CT 评估主动脉瓣狭窄所致主动脉根部参数改变 张 帅, 黄 霆, 郭 茜, 尚全良(419)

胸部影像学

基于卷积神经网络以超声影像学预测新辅助化疗用于乳腺癌效果 杨玉娥, 李鑫焱, 张文鑫, 孙 芳(424)

数字乳腺体层合成影像学列线图预测乳腺浸润性导管癌 Ki-67 表达水平 顾梦瑶, 陈 琪, 刘 丽, 戚佳佳, 李万湖(429)

腹部影像学

Fitz-Hugh-Curtis 综合征 CT 表现 杨朝红, 张 繁, 麻舒琳, 云惟健, 凌 坚, 王荣靖, 关 键(434)

多层螺旋 CT 增强扫描用于胃癌术前分期 张景臣, 高亦安, 徐漫兮, 原 宁, 马国林(439)

超声鉴别诊断儿童胰母细胞瘤与胰腺实性假乳头状瘤 唐雨欣, 游雅兹, 陈镜宇, 朱丽容, 王 婷, 唐 毅(443)

生殖泌尿影像学

瘤内及瘤周 CT 影像组学联合临床及影像学特征预测透明细胞肾细胞癌侵犯肾被膜 张晨阳, 贺俊红, 王鹏飞, 张 聪, 任金武(447)

骨骼肌肉影像学

MR 超短回波时间与 T1W 序列检出痛风性关节炎骨侵蚀 于 彤, 李晓莉, 聂 佩, 陈 颖, 韩 琳, 陈美涵, 李凤娇, 黄 鑫, 李长贵, 徐文坚(452)

脊柱慢性骨髓炎影像学表现 高丽香, 袁慧书, 张立华(457)

CIC 重排肉瘤临床及 CT、MRI 表现 杨熙宇, 陶逸宁, 汪浩宇, 赵博闻, 杨秀军, 孙 伟(461)

医学物理与工程学

基于前馈注意力 ConvNeXt 模型分割腹部 CT 中的胰腺 张文瀚, 王永雄, 曾福斌, 曹洋森(466)

影像技术学

静息态功能 MRI 分数低频振幅评估青少年吸烟成瘾者脑白质功能 宋岱凝, 薛 婷, 喻大华, 王俊轩, 忻五园, 丁静静, 罗 琳, 康永强(473)

超声联合血液学检验诊断急性复杂性阑尾炎 陈梅华, 林青青, 林碧霞, 谢美香, 黄文君(477)

综述

从慢性胰腺炎到胰腺癌:转化机制、影像学评估及预防治疗策略 梁 华, 吕 珂, 姜玉新(482)

静息态功能 MRI 研究神经精神疾病脑白质网络进展 谢雨辛, 张体江(486)

MRI 研究伴中央颞区棘波儿童自限性癫痫语言功能进展 宋林峰, 伍光榕, 张家仁, 江 林(490)

任务态功能 MRI 用于非自杀性自伤发病机制研究进展 彭诗集, 刘 念, 李 颖, 李航宇, 余 锐, 廖开科, 陈馨悦(494)

影像学研究结直肠癌肿瘤沉积进展 冯天祺, 刘欣杰, 蒋 伟, 石永贵, 刘昭男(498)

影像学研究嗜铬细胞瘤/副神经节瘤进展 成长发, 郭顺林(502)

个案报道

1 例 H3 G34 突变型弥漫性半球胶质瘤¹⁸F-FET PET/MR 显像 白 洁, 段焕利, 程 也, 卢 洁(506)

1 例脐尿管脓肿累及卵巢误诊为卵巢肿瘤 张珊珊, 王文倩, 秦佳乐(508)

食管静脉曲张经套扎后并发食管血肿 1 例 黄思婷, 郭剑波, 刘苏东, 陈奕金, 卢佳莹(510)

1 例黑色素瘤肝转移表现为肝脏弥漫性损伤 吕士英, 杨玉华, 程 瑾(511)

1 例未成年女性原发性卵巢黏液腺癌 MRI 表现 李建松(512)

本期执行主编 吴青青 伍建林
本期执行编委 田 艳
本期责任编辑 徐 悦 冯 洁 本期校对 杨 盼

CHINESE JOURNAL OF MEDICAL IMAGING TECHNOLOGY

Monthly Established in 1985 Vol 41, No 3 Mar 20, 2025

Responsible Institution

Chinese Academy of Sciences

Sponsor

Institute of Acoustics,
Chinese Academy of Sciences

Honorary Editor

LIU Yuqing TANG Xiaowei

Editor-in-Chief

HONG Nan LI Jianchu

Associate Editor

CHEN Tao CUI Ligang
FENG Feng HE Wen
LI Fenghua LI Yaming LU Jie
REN Weidong SUN Yingshi
TIAN Jiawei WANG Peijun
WANG Zhenchang WU Qingqing
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©2025 by the Press of
Chinese Journal of Medical Imaging
Technology Co. , Ltd

Contents in Brief

Specifications and Standards

- Expert consensus on imaging diagnosis of neurobrucellosis** (353)
Department of Infectious Diseases, Chinese Society of Radiology; Chinese Research Hospital Society of Infection and Inflammation Radiology Professional Committee; Chinese Association of AIDS Prevention and Treatment of Venereal Diseases AIDS Radiology Professional Committee; Digital Health Committee of China Association for the Promotion of Science and Technology Industrialization; Beijing Imaging Medical Technology Innovation Alliance; ZHANG Yihui, ZHAO Lingling, GUO Hui, LI Hongjun

Editorial

- New advances in fetal neurological ultrasound examination** (359)
SUN Lijuan, WU Qingqing

Focal Topics

- Prenatal ultrasonic findings of fetal malformation of cortical development** (363)
GUO Cuixia, SUN Lijuan, LIU Yan, ZHANG Tiejuan, WANG Li, HAN Jijing, WU Qingqing
- Three-dimensional ultrasound combined with microvascular flow imaging for prenatal diagnosis of fetal intracranial anomalies** (368)
CUI Yuanjie, GUO Cuixia, LI Zhen, ZHANG Juan, ZHANG Tiejuan, WANG Keyang, WU Qingqing, WU Yuting, SUN Lijuan
- Prenatal ultrasound for diagnosing fetal intracranial arachnoid cyst and predicting outcomes** (372)
ZHANG Guohui, SUN Lijuan, GUO Cuixia, CUI Yuanjie
- Advances in prenatal imaging assessment of fetal malformation of cortical development** (377)
ZHANG Simin, SHENG Changqing, ZHANG Yu, ZHANG Chunyan, YANG Xiaoxue, MAN Yuanyuan, CAI Yingying, YAN Rui, GAO Xinru
- Prenatal ultrasonic misdiagnosis of fetal malformation of cortical development as ventricular dilatation: Case report** (382)
HE Biyuan, ZHOU Yuqing

Experimental Study

- Impact factors of vascular heat sink effect during *in vitro* microwave ablation of porcine lung** (383)
CHEN Zenan, ZHANG Zhongliang, WANG Sibin, GUO Xinyuan, ZHANG Jing, ZHANG Xiaobo, HE Xiaofeng, MENG Liangliang, ZHANG Xin, WEI Yingtian, XIAO Yueyong, NAN Qun, ZHANG Xiao

Neuroimaging

- Dynamic functional connectivity changes of brain networks in different stages of Parkinson disease** (389)
LIU Qinru, TANG Yuqing, TAN Changlian, LI Xu, NIU Yaping, HUANG Congli, LIAO Haiyan
- T1WI deep learning models for evaluating brain injury of neonatal hyperbilirubinemia** (394)
CUI Jingwei, NIU Yongchao, XIE Beichen, LIU Chang, DUAN Jinhui, XUE Qin, YAN Ruifang
- Correlations of metabolite levels in medial prefrontal cortex and cancer-related depression in non-small cell lung cancer patients** (399)
LAN Jinhui, LI Pengqiang, REN Huling, WANG Yanfei, WANG Jing, ZHANG Yanli, ZHU Yi, DOU Yu
- Pathophysiological mechanism of posterior reversible encephalopathy syndrome** (404)
JIN Xin, WANG Yan, LIU Siping, WANG Zhibing, ZHANG Zhiqiang

Head and Neck Imaging

- Comparison on Qwen2. 5 and GPT-4o models for generating structured thyroid ultrasound reports** (409)
QIN Saimei, WEN Qiong, DUAN Yilian, XIANG Feixiang

Heart and Vascular Imaging

- Correlations between left atrial myocardial strain and left ventricular function in children with Duchenne muscular dystrophy** (414)
FENG Yang, SHEN Jiaqi, FAN Li, XIA Jiamin, YIN Chunmei, YANG Chunjiang

Multi-detector CT for evaluating aortic root parameters changes caused by aortic stenosis	(419)
ZHANG Shuai, HUANG Ting, GUO Xi, SHANG Quanliang	
Chest Imaging	
Ultrasound radiomics based on convolutional neural network for predicting effect of neoadjuvant chemotherapy for breast cancer	(424)
YANG Yue, LI Xinyan, ZHANG Wenxin, SUN Fang	
Radiomics nomogram based on DBT for predicting expression level of Ki-67 in breast invasive ductal carcinoma	(429)
GU Mengyao, CHEN Qi, LIU Li, QI Jiajia, LI Wanhua	
Abdominal Imaging	
CT manifestations of Fitz-Hugh-Curtis syndrome	(434)
YANG Zhaohong, ZHANG Fan, MA Shulin, YUN Weijian, LING Jian, WANG Rongjing, GUAN Jian	
Multi-slice spiral CT enhanced scanning for preoperative staging of gastric cancer	(439)
ZHANG Jingchen, GAO Yi'an, XU Manxi, YUAN Ning, MA Guolin	
Ultrasound for differentiating pancreatoblastoma and solid pseudopapillary tumor of pancreas in children	(443)
TANG Yuxin, YOU Yazi, CHEN Jingyu, ZHU Lirong, WANG Ting, TANG Yi	
Genitourinary Imaging	
Intratumoral and peritumoral CT radiomics combined with clinical and imaging features for predicting renal capsule invasion of clear cell renal cell carcinoma	(447)
ZHANG Chenyang, HE Junhong, WANG Pengfei, ZHANG Cong, REN Jinwu	
Musculoskeletal Imaging	
MR ultrashort echo time and T1W sequences for detecting bone erosions of gouty arthritis	(452)
YU Tong, LI Xiaoli, NIE Pei, CHEN Ying, HAN Lin, CHEN Meihan, LI Fengjiao, HUANG Xin, LI Changgui, XU Wenjian	
Imaging manifestations of spinal chronic osteomyelitis	(457)
GAO Lixiang, YUAN Huishu, ZHANG Lihua	
Clinical, CT and MRI manifestations of CIC-rearranged sarcoma	(461)
YANG Xiyu, TAO Yining, WANG Haoyu, ZHAO Bowen, YANG Xiujun, SUN Wei	
Imaging Physics and Engineering	
Segmentation model of pancreas from abdominal CT based on feedforward attention ConvNeXt	(466)
ZHANG Wenhan, WANG Yongxiong, ZENG Fubin, CAO Yangsen	
Imaging Technology	
Resting-state functional MRI fractional amplitude of low-frequency fluctuation for evaluating white matter function in adolescent smokers	(473)
SONG Daining, XUE Ting, YU Dahua, WANG Junxuan, XIN Wuyuan, DING Jingjing, LUO Lin, KANG Yongqiang	
Ultrasound combined with hematologic tests for diagnosing acute complicated appendicitis	(477)
CHEN Meihua, LIN Qingqing, LIN Bixia, XIE Meixiang, HUANG Wenjun	
Reviews	
From chronic pancreatitis to pancreatic cancer: Translational mechanisms, imaging assessments, prevention and treatment strategies	(482)
LIANG Hua, LYU Ke, JIANG Yuxin	
Research progresses of resting-state functional MRI on brain white matter networks in neuropsychiatric diseases	(486)
XIE Yuxin, ZHANG Tijiang	
Progresses of MRI researches of language function in self-limited epilepsy with centrottemporal spikes children	(490)
SONG Linfeng, WU Guangrong, ZHANG Jiaren, JIANG Lin	
Research progresses of task state functional MRI in pathogenesis of non-suicidal self-injury	(494)
PENG Shiji, LIU Nian, LI Ying, LI Hangyu, YU Rui, LIAO Kaike, CHEN Xinyue	
Progresses in imaging research of tumor deposits in colorectal cancer	(498)
FENG Tianqi, LIU Xinjie, JIANG Wei, SHI Yonggui, LIU Zhaonan	
Progresses in imaging research of pheochromocytoma and paraganglioma	(502)
CHENG Changfa, GUO Shulin	
Case Reports	
¹⁸F-FET PET/MR imaging in diffuse hemispheric glioma with histone H3 G34 mutation: Case report	(506)
BAI Jie, DUAN Huanli, CHENG Ye, LU Jie	
Urachal abscess involving ovary misdiagnosed as ovarian tumor: Case report	(508)
ZHANG Shanshan, WANG Wenqian, QIN Jiale	
Esophageal varices complicated with esophageal hematoma after ligation: Case report	(510)
HUANG Siting, GUO Jianbo, LIU Sudong, CHEN Yijin, LU Jiaying	
Liver metastases of melanoma present as diffuse liver injury: Case report	(511)
LYU Shiyong, YANG Yuhua, CHENG Jin	
MRI manifestations of primary ovarian mucinous adenocarcinoma in an immature female: Case report	(512)
LI Jiansong	