

# 中华医学超声杂志 (电子版)

CHINESE JOURNAL OF MEDICAL ULTRASOUND (Electronic Edition)

月刊 2004年2月创刊 第19卷 第10期 2022年10月1日出版 电子期刊导读

## 主管

中华人民共和国国家卫生健康委员会

## 主办

中华医学会  
100710, 北京东四西大街42号

## 出版

中华医学电子音像出版社有限责任公司  
100052, 北京东河沿街69号  
电话: 0086-10-51322622

## 编辑

中华医学超声杂志(电子版)编辑委员会  
100052, 北京东河沿街69号616室  
电话: 0086-10-51322622  
Email: csbjb@cma.org.cn  
http://chaosheng.cma-cmc.com.cn

## 总编辑

姜玉新 唐杰

## 编辑部主任

李军亮

## 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 BM1938

## 订购

全国各地邮政局  
邮发代号 80-313

## 电子期刊定价

每期28元, 全年336元

## 中国标准连续出版物号

ISSN 1672-6448  
CN 11-9115/R

2022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

本刊为电子期刊, 以网刊形式出版, 读者  
可以登录本刊网站, 输入以下电子期刊阅  
读码(本码仅限一个账号使用), 浏览整期  
内容

阅读码:

密码:

本册应读者需求按需印刷, 如有质量问题,  
请向编辑部调换

## 目次

### 述评

- 跟进梗阻性子宫阴道发育异常诊治进展, 关注超声评估的  
重要性和面临的挑战 ..... 王慧芳 王玥 1025

### 指南与规范

- 《ASRM 苗勒管发育异常分类2021版》解读  
..... 罗舒榆 林琪 王慧芳 1031

### 专家论坛

- 浅谈子宫附腔畸形的临床特征及超声影像学应用进展  
..... 戴晴 1036
- 梗阻性阴道横膈的影像学评估及临床诊治进展  
..... 鲁红 蔡晓彤 李奎 1042

### 妇产科超声影像学

- MRKH综合征的超声影像学特征及其诊断价值  
..... 陈广兰 王慧芳 胡守容等 1046
- 梗阻性子宫颈发育异常的超声特征及其诊断价值  
..... 陈欣 胡莎 罗红 1052
- 先天性阴道斜膈综合征临床特征及影像学诊断价值的  
初步研究 ..... 孝梦魁 戴晴 齐振红 1058
- 多途径超声联合检查在先天性阴道闭锁诊断中的  
应用价值 ..... 王慧芳 胡守容 郭蓉等 1065

### 心血管超声影像学

- 无创左心室压力-应变环评价阵发性心房颤动患者左心室  
心肌做功的价值 ..... 李沅芝 李一丹 丁雪晏等 1071
- 非冠状动脉梗阻性缺血性心脏病女性患者心率储备  
与微循环功能障碍的相关性研究 ... 刘婷婷 丁明岩 冀威等 1077
- 超声漏诊误诊无顶冠状静脉窦综合征13例分析  
..... 许春燕 谢明星 方凌云等 1083
- 二维斑点追踪超声心动图对业余马拉松运动员右心室  
收缩功能的评估 ..... 张贺彬 高枫 郑哲岚等 1091

## 浅表器官超声影像学

- 超声微血流成像联合弹性成像评分对甲状腺 TI-RADS 4 类结节良恶性的  
鉴别诊断价值 ..... 郭东 姚春 庞海芬等 1098
- 乳腺纤维腺瘤的超声诊断及误诊分析 ..... 代妮娜 张文君 1103

## 小儿超声影像学

- 儿童大网膜扭转超声诊断分析 11 例 ..... 吕秋晨 董丽楠 刘畅等 1108

## 基础研究

- 掌上超声在枪弹伤致髂动脉破裂大出血建模中的应用研究 ..... 黄钰清 武社社 潘菲等 1112

## 综述

- 胎儿先天性心脏病对相关器官的影响及评价方法 ..... 陈欣林 成晨 1118
- 超声心动图评价右心室-肺动脉耦联的研究进展 ..... 孟庆龙 王浩 1122
- 基于超声图像的机器学习算法应用于颈动脉斑块风险评估的研究进展 ..... 李晓 胡兵 白文坤 1127
- 左心室中部肥厚型梗阻性心肌病的研究进展 ..... 陶佳 王浩 1131
- 常规超声及超声新技术在淋巴瘤诊治中的应用进展 ..... 卢文娟 邓红艳 陈文琴等 1135
- 压力对超声弹性成像诊断价值的影响 ..... 王阿晨 孙佳威 周显礼 1139

## 病例报告

- 经直肠双平面高频超声结合阴道水造影检查诊断阴道高位不全性横膈一例 ..... 胡守容 郭蓉 王慧芳 1143
- 常规超声结合经直肠双平面高频超声诊断非典型 MRKH 综合征一例 ..... 张丹丹 郭蓉 陈广兰等 1145
- 儿童阴囊冬眠瘤超声误诊一例 ..... 龚婷 黄海滔 金梅等 1148
- 原发性左心房梭形细胞肉瘤及术后复发一例 ..... 亢庆文 朱英 魏翔等 1151
- 产前诊断胎儿先天性失氯性腹泻一例 ..... 成晨 赵胜 陈欣林 1154

## 视频

- 跟进梗阻性子官阴道发育异常诊治进展,关注超声评估的重要性和面临的挑战 ..... 王慧芳 1156

中华医学超声杂志(电子版)第四届编辑委员会成员名单 ..... 对封二

中华医学超声杂志(电子版)第四届通讯编委名单 ..... 1111

中华医学超声杂志(电子版)稿约见本卷第 1 期

本期执行主编 王慧芳

本期责任编辑 汪荣 本期英文编辑 王天奇 本期责任排版 年丽红

---

---

# CHINESE JOURNAL OF MEDICAL ULTRASOUND (Electronic Edition)

Monthly Established in February 2004 Volume 19, Number 10 October 1, 2022

---

## Responsible Institution

National Health Commission of the  
People's Republic of China

## Sponsor

Chinese Medical Association  
42 Dongsi Xidajie, Beijing 100710, China

## Publishing

Chinese Medical Multimedia Press  
Co., Ltd.  
69 Dongheyan Street, Xicheng District, Beijing  
100052, China  
Tel: 0086-10-51322622

## Editing

Editorial Board of Chinese Journal of  
Medical Ultrasound (Electronic Edition)  
Room 616, 69 Dongheyan Street, Xicheng District,  
Beijing 100052, China  
Tel: 0086-10-51322622  
Email: csbjb@cma.org.cn  
<http://chaosheng.cma-cmc.com.cn>

## Editor-in-Chief

Jiang Yuxin (姜玉新)  
Tang Jie (唐杰)

## Managing Director

Li Junliang (李军亮)

## Overseas Distributor

China International Book  
Trading Corporation  
P. O. Box 399, Beijing 100044, China  
Code No. BM 1938

## CSSN

ISSN 1672-6448  
CN 11-9115/R

## Copyright © 2022 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 Medical Association or the Editorial Board, unless this is clearly specified.

## CONTENTS IN BRIEF

### Editorial

- Progress in diagnosis and treatment of obstructive uterovaginal dysplasia and importance and challenges of ultrasound assessment** .....1025  
*Wang Huifang, Wang Yue*

### Guideline and Specification

- Interpretation of ASRM Müllerian anomalies classification 2021** .....1031  
*Luo Shuyu, Lin Qi, Wang Huifang*

### Expert Opinion

- Accessory cavitated uterine malformation: clinical characteristics and application of ultrasound in diagnosis** .....1036  
*Dai Qing*
- Advances in imaging evaluation and clinical diagnosis and treatment of obstructive transverse vaginal septum** .....1042  
*Lu Hong, Cai Xiaotong, Li Kui*

### Obstetric and Gynecologic Ultrasound

- Ultrasonographic imaging features and diagnostic value of MRKH syndrome** .....1046  
*Chen Guanglan, Wang Huifang, Hu Shourong, et al*
- Ultrasonographic features and diagnostic value of obstructive cervical dysplasia** .....1052  
*Chen Xin, Hu Sha, Luo Hong*
- Congenital vaginal oblique septum syndrome: clinical features and diagnostic value of imaging examinations** .....1058  
*Xiao Mengsu, Dai Qing, Qi Zhenhong*
- Role of multipath ultrasonography in diagnosing congenital vaginal atresia** .....1065  
*Wang Huifang, Hu Shourong, Guo Rong, et al*

### Cardiovascular Ultrasound

- Application of non-invasive left ventricular pressure-strain loop in evaluating left ventricular myocardial work in paroxysmal atrial fibrillation patients** .....1071  
*Li Yuanzhi, Li Yidan, Ding Xueyan, et al*
- Correlation between heart rate reserve and microcirculatory dysfunction in female patients with non-coronary obstructive ischemic heart disease** .....1077  
*Liu Tingting, Ding Mingyan, Ji Wei, et al*
- Missed and misdiagnosis of 13 cases of unroofed coronary sinus syndrome by echocardiography** .....1083  
*Xu Chunyan, Xie Mingxing, Fang Lingyun, et al*

<b>Assessment of right ventricular systolic function in amateur marathoners by two-dimensional specking echocardiography</b> .....	1091
<i>Zhang Hebin, Gao Feng, Zheng Zhelan, et al</i>	
<b>Superficial Parts Ultrasound</b>	
<b>Value of ultrasound micro-blood flow imaging combined with elastography score in differential diagnosis of benign and malignant TI-RADS 4 thyroid nodules</b> .....	1098
<i>Guo Dong, Yao Chun, Pang Haisu, et al</i>	
<b>Ultrasonic diagnosis of breast fibroadenoma and analysis of causes of misdiagnosis</b> .....	1103
<i>Dai Nina, Zhang Wenjun</i>	
<b>Pediatric Ultrasound</b>	
<b>Ultrasound diagnosis of omentum torsion in 11 children</b> .....	1108
<i>Lyu Qiuchen, Dong Linan, Liu Chang, et al</i>	
<b>Basic Science Research</b>	
<b>Application of handheld ultrasound in establishment of a swine model of iliac artery hemorrhage from gunshot wound</b> .....	1112
<i>Huang Yuqing, Wu Dudu, Pan Fei, et al</i>	
<b>Reviews</b>	
<b>Effects of fetal congenital heart disease on related organs and evaluation methods</b> .....	1118
<i>Chen Xinlin, Cheng Chen</i>	
<b>Progress in echocardiography evaluation of right ventricular-pulmonary arterial coupling</b> .....	1122
<i>Meng Qinglong, Wang Hao</i>	
<b>Advances in application of ultrasound image-based machine learning algorithms in carotid plaque risk assessment</b> .....	1127
<i>Li Xiao, Hu Bing, Bai Wenkun</i>	
<b>Progress in research of left mid-ventricular hypertrophic obstructive cardiomyopathy</b> .....	1131
<i>Tao Jia, Wang Hao</i>	
<b>Advances in application of conventional ultrasound and new ultrasound technologies in diagnosis and treatment of lymphoma</b> .....	1135
<i>Lu Wenjuan, Deng Hongyan, Chen Wenqin, et al</i>	
<b>Effect of precompression on diagnostic value of ultrasound elastography</b> .....	1139
<i>Wang Achen, Sun Jiawei, Zhou Xianli</i>	
<b>Case Reports</b>	
<b>Diagnosis of incomplete high transverse vaginal septum by transrectal biplane high frequency ultrasound combined with saline infusion sonography: a case report</b> .....	1143
<i>Hu Shourong, Guo Rong, Wang Huifang</i>	
<b>A case of atypical MRKH syndrome diagnosed by conventional ultrasonography combined with transrectal bi-planar high-frequency ultrasonography</b> .....	1145
<i>Zhang Dandan, Guo Rong, Chen Guanglan, et al</i>	
<b>Misdiagnosis of intrascrotal hibernoma in a child by ultrasonography</b> .....	1148
<i>Gong Ting, Huang Haitao, Jin Mei, et al</i>	
<b>Postoperative recurrence of primary spindle cell sarcoma of the left atrium: a case report</b> .....	1151
<i>Kang Qingwen, Zhu Ying, Wei Xiang, et al</i>	
<b>Prenatal diagnosis of congenital chloride diarrhea: a case report</b> .....	1154
<i>Cheng Chen, Zhao Sheng, Chen Xinlin</i>	
<b>Video</b>	
<b>Progress in diagnosis and treatment of obstructive uterovaginal dysplasia and importance and challenges of ultrasound assessment</b> .....	1156
<i>Wang Huifang</i>	