

# 中国骨伤<sup>®</sup>

ZHONGGUO GUSHANG

月刊 1987 年创刊 第 35 卷 第 10 期 2022 年 10 月 25 日出版

主 管

国家中医药管理局

主 办

中国中西医结合学会

中国中医科学院

编 辑

中国骨伤杂志编辑委员会

100700, 北京市东直门内南小街甲 16 号

电话:(010)64089487

传真:(010)64089792

http://www.zggszz.com

E-mail:zggszz@sina.com

主 编 朱立国

执行主编 李为农

编辑部副主任 连智华

出 版

《中国骨伤》杂志社

100700, 北京市东直门内南小街甲 16 号

电话:(010)64089489

传真:(010)64089792

E-mail:zggszz@sina.com

广告发布登记号

京东工商广登字 20180004 号

印 刷

北京汇林印务有限公司

发 行

国内:中国邮政集团公司

北京市报刊发行局

海外:中国国际图书贸易集团

有限公司

(北京 399 信箱, 100044)

代号 M587

订 购

全国各地邮局

邮发代号 82-393

邮 购

《中国骨伤》杂志社

100700, 北京市东直门内南小街甲 16 号

国 内 定 价

每期 40.00 元, 全年 480.00 元

中国标准连续出版物号

ISSN 1003-0034

CN 11-2483/R

版权归《中国骨伤》杂志社所有

本刊刊出的所有文章不代表本刊编委会  
的观点, 除非特别声明

## 目 次

述评

- Ilizarov 骨搬移技术 ..... 903  
杨华清, 曲龙

骨搬移技术

- 单边和环形外架在感染性胫骨骨不连治疗中的对比研究 ..... 908  
聂少波, 吴韬光, 郝明, 王锟, 纪辉, 张群

- 胫骨骨运输术中对接端新鲜化技术的临床观察 ..... 914  
滕星, 黄雷, 杨胜松, 王陶, 公茂琪, 蒋协远

- NRD 辅助 Ilizarov 技术治疗胫骨感染性骨与软组织缺损 ..... 921  
杨华清, 章耀华, 李强, 张鸿悦, 赵殿钊, 韩庆海, 杨云, 杨启昌, 曲龙

- 胫骨骨搬移后再骨折的临床观察 ..... 927  
张彦龙, 刘士波, 王泳, 吴天昊, 桑睿政, 董健伟, 李鹏飞, 吴希瑞,

彭阿钦

临 床 研 究

- 腰椎两种不同椎间融合方式终板损伤的病例对照研究 ..... 933  
曾忠友, 吴宏飞, 范时洋, 范顺武, 方向前, 赵兴, 宋永兴, 俞伟,

- 裴斐, 宋国浩  
斜外侧椎间融合术联合 Wiltse 入路单侧椎弓根钉棒固定治疗  
腰椎管狭窄症 ..... 943  
王志强, 张建群, 梁思敏, 刘晓印, 郭伟, 马强, 戈朝晖

- 两种弹性固定系统在单节段腰椎间盘突出症髓核摘除术中的  
对照研究 ..... 951  
吴泽宣, 徐洪海, 韩晓帆, 李伟伟, 段亮, 段大鹏, 杨俊生

- 肌内效贴联合电针治疗 I 型肩峰撞击综合征 ..... 957  
唐浩琛, 胡锐, 唐流刚, 王标, 程远东, 康慧敏

- 多层次螺旋 CT 与 MRI 在膝关节隐匿性骨折伴半月板及韧带  
损伤中的诊断比较 ..... 967  
叶清岚, 李晶, 候金丹, 蔡磊, 熊星, 王海姣

全关节镜下肩袖修补术对老年肩袖损伤患者术后 72 h 内疼痛程度和并发症的影响	971
张玉龙,焦成,荣林	
预成型肋骨锁定钛板联合超声引导下胸椎旁神经阻滞治疗老年多发性肋骨骨折	979
桑宏阳,邬松,范正洋,李谦平,成少飞,范坤	
基于动态肌电图的腰椎间盘突出症诊治和相关因素研究	984
黄萍,卢玄,郭蕾,徐醒,沈峰嵘,陈博	
肩胛下肌强化缝合术治疗伴有严重盂唇损伤的复发性肩关节脱位	996
刘涛,张明涛,杨智涛,张柏荣,姜金,安丽萍,刘芳香,杨伟丽,韵向东	
<b>基础研究</b>	
关节镜下不同穿骨技术修复肩袖损伤的有限元分析	990
季康,俞涵,陈刚,潘界恩,李金	
<b>经验交流</b>	
肱骨近端骨折肱骨头置换假体高度的控制	1000
陈为民,张学军,王卫军,王宸	
胸锁关节钩接骨板治疗急性不稳定性锁骨近端骨折	1004
孙方贵,刘瑞,熊新为,徐荣明,张强理	
<b>病例报告</b>	
局麻下桡骨远端骨折手法复位中盐酸利多卡因中毒致休克 1 例	977
李三标	
儿童胸椎化脓性脊柱炎误诊为脊柱结核 1 例	1008
牛建雄,张同同,薛文,金涛,史宇惊,王增平,文杰,史安利,刘林	
<b>综述</b>	
膝关节单髁置换术下肢力线纠正及假体位置角度研究进展	962
丁松,陈明亮,谷成毅,许涛,周游	
<b>广告及消息</b>	
珠海昆明积大制药股份有限公司广告	封 2
石家庄华行医疗器械有限公司广告	封 3
<b>本刊稿约见本卷第Ⅱ期</b>	
本期责任编辑:连智华 朱嘉	

# CHINA JOURNAL OF ORTHOPAEDICS AND TRAUMATOLOGY

Monthly Established in 1987 Volume 35 ,Number 10 October 25 ,2022

## Responsible Institution

State Administration of  
Traditional Chinese Medicine

## Sponsor

Chinese Association of Integrative  
Medicine ;  
China Academy of Chinese Medical  
Sciences  
No.16 Nanxiaojie Dongzhimennei,  
Beijing 100700, China

## Editing

Editorial Board of China Journal of  
Orthopaedics and Traumatology

## Editor-in-Chief

ZHU Li-guo(朱立国)

## Executive Editor

LI Wei-nong(李为农)

## Assistant Director

LIA N Zhi-hua(连智华)

## Publishing

Publishing House, China Journal of  
Orthopaedics and Traumatology  
No.16A Nanxiaojie Dongzhimennei,  
Beijing 100700, China  
Tel(Fax) :0086-10-64089792  
E-mail :zggsszz@sina.com

## Printing

Beijing Huilin Printing Co., Ltd

## Overseas Distributor

China International Book Trading  
Corporation  
P.O.Box 399, Beijing, China  
Code No.M587

## Mail-order

Publishing House, China Journal of  
Orthopaedics and Traumatology  
No.16A Nanxiaojie Dongzhimennei,  
Beijing 100700, China  
Tel(Fax) :0086-10-64089792  
E-mail :zggsszz@sina.com

## CSSN

ISSN 1003-0034  
CN 11-2483/R

Copyright © 2022 by the China Journal of  
Orthopaedics and Traumatology Press

All articles published represent the opinions  
of the authors, do not represent official  
policy of the Editorial Board, unless  
this is clearly specified

## CONTENTS IN BRIEF

### Forum of specialist

- Ilizarov bone transport technique ..... 903  
YANG Hua-qing, QU Long

### Bone transfer technique

- Comparative study of monolateral and circular fixator in the treatment of infectious tibial nonunion\* ..... 908  
NIE Shao-bo, WU Tao-guang, HAO Ming, WANG Kun, JI Hui, ZHANG Qun

- Effect of freshening technique on docking site in tibial bone transport management\* ..... 914

- TENG Xing, HUANG Lei, YANG Sheng-song, WANG Tao, GONG Mao-qi, JIANG Xie-yuan

- NRD assisted Ilizarov technique in the treatment of infected bone and soft tissue defect of tibia\* ..... 921

- YANG Hua-qing, ZHANG Yao-hua, LI Qiang, ZHANG Hong-yue, ZHAO Dian-zhao, HAN Qing-hai, YANG Yun, YANG Qi-chang, QU Long

- Clinical therapeutic strategies of refracture after bone transport for tibial bone defect\* ..... 927

- ZHANG Yan-long, LIU Shi-bo, WANG Yong, WU Tian-hao, SANG Rui-zheng, DONG Jiang-wei, LI Peng-fei, WU Xi-rui, PENG A-qin

### Clinical study

- Case-control study on endplate injury of lumbar spine with two different intervertebral fusion methods\* ..... 933  
ZENG Zhong-you, WU Hong-fei, FAN Shi-yang, FAN Sun-wu, FANG Xiang-qian, ZHAO Xing, SONG Yong-xing, YU Wei, PEI Fei, SONG Guo-hao

- Clinical efficacy of oblique lumbar interbody fusion combined with unilateral pedicle screw fixation via Wiltse approach in the treatment of lumbar spinal stenosis\* ..... 943

- WANG Zhi-qiang, ZHANG Jian-qun, LIANG Si-min, LIU Xiao-yin, GUO Wei, MA Qiang, GE Zhao-hui

- Comparative study of two elastic fixation systems in single-segment lumbar disc herniation surgery for nucleus pulposus extraction\* ..... 951

- WU Ze-xuan, XU Hong-hai, HAN Xiao-fan, LI Wei-wei, DUAN Liang, DUAN Da-peng, YANG Jun-sheng

- Kinesio Taping combined with electroacupuncture for the treatment of Bigliani type I subacromial impingement syndrome\* ..... 957

- TANG Hao-chen, HU Rui, TANG Liu-gang, WANG Biao, CHENG Yuan-dong, KANG Hui-min

<b>Comparison of multislice spiral CT and MRI in diagnosis of occult fracture of knee joint with meniscus and ligament injury*</b>	.....	967
YE Qing-lan, LI Jing, HOU Jin-dan, CAI Lei, XIONG Xing, WANG Hai-jiao		
<b>Effect of total arthroscopic rotator cuff repair on the pain degree and complications of elderly patients with rotator cuff injury within 72 hours after operation*</b>	.....	971
ZHANG Yu-long, JIAO Cheng, RONG Lin		
<b>Combined use of prefabricated rib-locking titanium plate with ultrasound-guided thoracic paravertebral nerve blockade in the treatment of multiple rib fractures among the elderly*</b>	.....	979
SANG Hong-yang, WU Song, FAN Zheng-yang, LI Qian-ping, CHENG Shao-fei, FAN Kun		
<b>Study on diagnosis and treatment of lumbar disc herniation and related factors based on dynamic electromyography*</b>	.....	984
HUANG Ping, LU Xuan, GUO Lei, XU Xing, SHEN Zheng-rong, CHEN Bo		
<b>Arthroscopic subscapularis augmentation for the treatment of recurrent dislocation of shoulder with severe glenoid injury*</b>	.....	996
LIU Tao, ZHANG Ming-tao, YANG Zhi-tao, ZHANG Bo-rong, JIANG Jin, AN Li-ping, LIU Fang-xiang, YANG Wei-li, YUN Xiang-dong		

## Experiment research

<b>Finite element analysis of arthroscopic repair of rotator cuff injury with different transosseous techniques*</b>	.....	990
JI Kang, YU Han, CHEN Gang, PAN Jie-en, LI Jin		

## Empirical communication

<b>Height control in shoulder hemiarthroplasty for the treatment of proximal humerus fractures*</b>	.....	1000
CHEN Wei-min, ZHANG Xue-jun, WANG Wei-jun, WANG Chen		
<b>Treatment of acute unstable proximal clavicular fracture with Hook plate of sternoclavicular joint*</b>	.....	1004
SUN Fang-gui, LIU Rui, XIONG Xin-wei, XU Rong-ming, ZHANG Qiang-li		

## Case report

<b>A case of shock caused by lidocaine hydrochloride poisoning during manual reduction of distal radius fracture under local anesthesia</b>	.....	977
LI San-biao		
<b>Misdiagnosis of thoracic suppurative spondylitis as spinal tuberculosis in children: a case report</b>	.....	1008
NIU Jian-xiong, ZHANG Tong-tong, XUE Wen, JIN Tao, SHI Yu-cong, WANG Zeng-ping, WEN Jie, SHI An-li, LIU Lin		

## Review

<b>Research progress on lower limb alignment correction and prosthesis position angle in unicompartmental knee arthroplasty*</b>	.....	962
DING Song, CHEN Ming-liang, GU Cheng-yi, XU Tao, ZHOU You		

\*With English abstract