

ZHONGGUO ER-BI-YANHOU
LUDI WAIKE ZAZHI

IS
IS
CN 43-1241/R



Q K 2 0 6 0 8 8 3

中国耳鼻咽喉 颅底外科杂志

CHINESE JOURNAL OF
OTORHINOLARYNGOLOGY-SKULL
BASE SURGERY

中国科技论文统计源期刊

中国科技核心期刊

中国核心期刊（遴选）数据库收录期刊

中文科技期刊数据库（全文版）收录期刊

ISSN 1007-1520



12>
9 771007 152207



第 6 期
(总第138期)

2020年12月 第26卷(本卷终)

中国耳鼻咽喉颅底外科杂志



官方微信平台

ZHONGGUO ER - BI - YANHOU LUDI WAIKE ZAZHI

双月刊 1995 年 7 月创刊 第 26 卷 第 6 期 2020 年 12 月 30 日出版

主 管

中华人民共和国教育部

主 办

中南大学

中南大学湘雅医院

编 辑

中国耳鼻咽喉颅底外科杂志

编辑委员会

410008 湖南省长沙市湘雅路 87 号

电话(传真):(0731)84327469;84327210

Email:xyent@126.com

主 编

孙 虹 赵素萍

执行主编

张 欣

编辑部主任

李惠清 黄东海

出 版

湖南省湘雅医学期刊社有限公司

410008 湖南省长沙市湘雅路 87 号

电话(传真):(0731)84327469;84327210

Email:xyent@126.com

广告发布登记编号

湘市监广登字[2020]第 36 号

印 刷

湖南省新创印务有限公司

发 行

国内:湖南省报刊发行局

国外:中国国际图书贸易总公司
(北京 399 信箱,100044)

订 购

国内邮发代号:42-171

国外邮发代号:BM1735

邮 购

中国耳鼻咽喉颅底外科杂志编辑部
410008 湖南省长沙市湘雅路 87 号
电话(传真):(0731)84327469;84327210
Email:xyent@126.com

投稿网址

<http://www.xyosbs.com>

订阅网址

www.kankan.cn

国内定价

每期 20 元,全年 120 元

中国标准刊号

ISSN 1007-1520

CN 43-1241/R

2020 年版权归本刊主办单位所有
本刊刊出的所有文章不代表主办单位
和本刊编委会的观点,除非特别声明

目 次

专家论坛

老年性聋人工耳蜗植入进展

..... 熊 伟, 龚树生(603)

专家笔谈

儿童人工耳蜗植入年龄下限降至 9 月龄的启示与应对

..... 郁 昕(609)

人工耳蜗专栏

人工耳蜗植入患者术后汉语声韵调识别能力临床分析

..... 陈艾婷, 李 楠, 王 倩, 洪梦迪, 焦青山,
李思阳, 李佳楠, 杨仕明, 冀 飞(615)

耳蜗性耳硬化症人工耳蜗植入的应用研究

..... 龙梦琦, 贺楚峰, 秦梦瑶, 陆小净,
梅凌云, 冯 永, 吴 宏(620)

人工耳蜗在老年性聋患者中的应用

..... 吴 宏, 冯 永, 梅凌云, 蔡鑫章, 贺楚峰(626)

脑膜炎后耳蜗骨化患者人工耳蜗植入的临床分析

..... 张 娜, 董瑞娟, 李 轶, 马晓波,
王丹妮, 郑 军, 陈雪清, 赵守琴(631)

先天性外耳道骨性闭锁患者人工耳蜗植入的手术分析

..... 李 颖, 王丹妮, 赵守琴(637)

神经反应遥测技术应用于婴幼儿人工耳蜗植入的作用和体会

..... 伍美芳, 王春花, 熊杉杉, 蒋 明, 谭国林(641)

人工耳蜗植入术的并发症及处理

..... 蔡文魁, 史强有, 王 静, 安 飞, 钟翠萍(645)

论著

内镜辅助耳前颞下窝入路颞下窝良性肿瘤切除术

..... 严 波, 危 维, 杨晓彤, 吕海丽, 张秋航(650)

影像导航下视神经减压术治疗外伤性视神经病

..... 任乐舒,安云芳,赵长青,王艳杰,李崇妮,任 莹,路晔敏(655)

慢性鼻窦炎鼻息肉合并哮喘患者外周血和鼻息肉组织中炎症细胞的对比分析

..... 于寒冰,阎艾慧(660)

单侧翼管神经切断术治疗变应性鼻炎的疗效及影响因素分析

..... 张竞莹,李璐鑫,冀永进,王艳杰,赵长青(666)

南充市儿童变应性鼻炎伴发哮喘的影响因素分析

..... 吴俊志,张 震,喻望博,赵 锐,朱 鑫,冯成敏,敬一丹,程 瑶,邓世山,刘 海(670)

益生菌辅助治疗变应性鼻炎疗效的 Meta 分析

..... 程 怡,林晓红,廖若莎,罗笑容(676)

男性杓状软骨钙化对喉接触性肉芽肿治疗效果的影响

..... 聂 倩,李进让,张 冉,邹世桢(682)

临床报道

不同类型先天性中耳畸形的手术治疗

..... 安 飞,刘 伟,马 贤,王茂鑫,袁 媛,钟翠萍(686)

真菌性鼻-鼻窦炎鼻石形成致鼻中隔穿孔 1 例并文献复习

..... 梁 丹,李湘胜,谢东海,彭 亚(690)

乳腺癌鼻腔鼻窦颅底转移 1 例

..... 贺新娣,王 英(693)

鼻咽结核 1 例并文献复习

..... 白云丹,李 重,刘 鹤,李 宇,王中亮(695)

舌咽神经阻滞对儿童扁桃体切除术后疼痛的影响

..... 康尧杰,覃爱玲(698)

教学园地

耳内镜技术结合虚拟解剖系统在耳科解剖教学中的应用

..... 范宇琴,吴 瑚,汪照炎,王珮华,王振涛,梁 冰(703)

综述

创伤性鼓膜穿孔的治疗及其研究进展

..... 冯瑞瑞,柴向斌(707)

血小板活化因子在变应性鼻炎中的作用及其研究进展

..... 邓卓怡,刘晓玲(712)

基质金属蛋白酶及抑制剂影响细胞外基质代谢参与慢性鼻-鼻窦炎组织重塑的机制研究

..... 周梦夏,孙作珩,查旭东,刘环海(717)

鼻整形患者疾病特异性生存质量量表的研究

..... 孙笑晗,李 娜,陈凯璇,姜 彦(721)

消息

2020 年度《中国耳鼻咽喉颅底外科杂志》(第 26 卷)总目录 (I)

本期执行主编 孙 虹 执行编审 赵素萍 张 欣

责任编辑 徐 芳 英文摘要审校 李泽卿 冯雪萍

期刊基本参数:CN 43 - 1241/R * 1995 * b * A4 * 122 * zh * P * ¥20.00 * 2400 * 26 * 2020-12

CHINESE JOURNAL OF OTORHINOLARYNGOLOGY - SKULL BASE SURGERY

Bimonthly

Established in July 1995

Volume 26, Number 6

December 30, 2020

Responsible Institution

Ministry of Education of China

Sponsor

Central South University

Xiangya Hospital of Central South University

Editing

Editorial Board of Chinese Journal
of Otorhinolaryngology - Skull Base Surgery
87 Xiangya Road, Changsha Hunan 410008, China
Tel(Fax):(0086-731)84327469,84327210
Email:xyent@126.com

Editors - in - Chief

SUN Hong (孙虹)
ZHAO Su-ping (赵素萍)

Executive Editor - in - Chief

ZHANG Xin (张欣)

Managing Director

LI Hui-qing (李惠清)
HUANG Dong-hai (黄东海)

Publishing

Hunan Xiangya Medical Periodical Press Co. Ltd
87 Xiangya Road, Changsha Hunan 410008, China
Tel(Fax):(0086-731)84327469,84327210
Email:xyent@126.com

Printing

Hunan Xinchuang Printing Co. Ltd.

Overseas Distributor

China International Book Trading Corporation
P. O. Box 399, Beijing, China, 100044

Mail Order

Editorial Board of Chinese Journal of
Otorhinolaryngology-Skull Base Surgery

CSSN

ISSN 1007-1520
CN 43-1241/R

Copyright © 2020 by the Xiangya Hospital, Central South University

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

CONTENTS

EXPERT FORUM

Progress of cochlear implantation in the elderly

XIONG Wei, GONG Shusheng (603)

EXPERT ESSAY

Official approval to lower the age of pediatric cochlear implantation to 9 months: inspiration and responses

XI Xin (609)

COCHLEAR IMPLANT COMLUMN

Clinical analysis of Chinese Mandarin tone recognition capability in patients with cochlear implantation

CHEN Aiting, LI Nan, WANG Qian, HONG Mengdi, JIAO Qingshan, LI Siyang, LI Jianan, YANG Shiming, JI Fei (615)

Application of cochlear implantation for cochlear otosclerosis

LONG Mengqi, HE Chufeng, QIN Mengyao, LU Xiaojing, MEI Lingyun, FENG Yong, WU Hong (620)

Application of cochlear implantation in patients with presbycusis

WU Hong, FENG Yong, MEI Lingyun, CAI Xinzhang, HE Chufeng (626)

Cochlear implantation in patients with cochlear ossification after meningitis

ZHANG Na, DONG Ruijuan, LI Yi, MA Xiaobo, WANG Danni, ZHENG Jun, CHEN Xueqing, ZHAO Shouqin (631)

Analysis of cochlear implantation in patients with congenital aural bony atresia

LI Ying, WANG Danni, ZHAO Shouqin (637)

The role and application experience of nerve response telemetry in infant cochlear implant

WU Meifang, WANG Chunhua, XIONG Shanshan, JIANG Ming, TAN Guolin (641)

Complications and management of cochlear implantation

LIN Wenkui, SHI Qiangyou, WANG Jing, AN Fei, ZHONG Cuiping (645)

ORIGINAL ARTICLE

Resection of infratemporal fossa benign tumors via endoscopic preauricular infratemporal fossa approach

YAN Bo, WEI Wei, YANG Xiaotong, LYU Haili, ZHANG Qiuhang (650)

Traumatic optic neuropathy treated by image-guided optic decompression	
REN Yueshu, AN Yunfang, ZHAO Changqing, WANG Yanjie, LI Chongni, REN Ying, LU Yemin	(655)
Effect of asthma on the number and proportion of inflammatory cells in chronic rhinosinusitis with nasal polyps	
YU Hanbing, YAN Aihui	(660)
Analysis of curative effect and its influencing factors of unilateral vidian neurectomy in the treatment of patients with allergic rhinitis	
ZHANG Jingying, LI Luxin, JI Yongjin, WANG Yanjie, ZHAO Changqing	(666)
Analysis on the influencing factors of childhood allergic rhinitis with asthma in Nanchong city	
WU Junzhi, ZHANG Zhen, YU Wangbo, ZHAO Rui, ZHU Xin, FENG Chengmin, JING Yidan, CHEN Yao, DENG Shishan, LIU Hai	(670)
Efficacy of Probiotics in the treatment of allergic rhinitis:a Meta-analysis	
CHENG Yi, LIN Xiaohong, LIAO Ruosha, LUO Xiaorong	(676)
Arytenoid cartilage calcification on the therapeutic effect of laryngeal contact granuloma in male patients	
NIE Qian, LI Jinrang, ZHANG Ran, ZOU Shizhen	(682)

CLINICAL REPORT

Surgical treatment of different congenital middle ear malformation	
AN Fei, LIU Wei, MA Xian, WANG Maoxin, YUAN Yuan, ZHONG Cuiping	(686)
A case of nasal septal perforation caused by fungal sinusitis with rhinolith	
LIANG Dan, LI Xiangsheng, XIE Donghai, PENG Ya	(690)
Breast cancer with metastasis to the nasal cavity,paranasal sinus and skull base;a case report	
HE Xindi, WANG Ying	(693)
Nasopharyngeal tuberculosis: a case report and review of the literature	
BAI Yundan, LI Zhong, LIU He, LI Yu, WANG Zhongliang	(695)
Effect of glossopharyngeal nerve block with bupivacaine on pain after tonsillectomy in children	
KANG Yaojie, QIN Ailing	(698)

TEACHING CORNER

Applying of the otoscope technology combined with virtual anatomy system in training otolaryngology doctors	
FAN Yuqin, WU Hao, WANG Zhaoyan, WANG Peihua, WANG Zhentao, LIANG Bing	(703)

REVIEW

Treatment and research progress of traumatic tympanic membrane perforation	
FENG Ruirui, CHAI Xiangbin	(707)
Role of platelet activating factor and its research progress in allergic rhinitis	
DENG Zhuoyi, LIU Xiaoling	(712)
Advances in the mechanism of matrix metalloproteinases and inhibitors affecting extracellular matrix metabolism and participating in CRS tissue remodeling	
ZHOU Mengxia, SUN Zuoheng, CHA Xudong, LIU Huanhai	(717)
Research progress of disease-specific quality of life scale for patients with rhinoplasty	
SUN Xiaohan, LI Na, CHEN Kaixuan, JIANG Yan	(721)



向战斗在抗击疫情一线的同志致敬

— 中南大学湘雅医院防治新型冠状病毒肺炎工作纪实



摄影：肖毅