

[DOI]10.12016/j.issn.2096-1456.202440249

· 临床研究 ·

耳周V形切口与改良Blair切口入路切除腮腺浅叶良性肿瘤的疗效比较

伍诗涵^{1,2}, 热依汉古力·穆合塔尔^{1,2}, 阿地拉·阿布力孜^{1,2}, 杨蓉^{1,2}, 许辉²

1. 新疆医科大学研究生院, 新疆维吾尔自治区 乌鲁木齐(830011); 2. 新疆维吾尔自治区人民医院口腔颌面外科, 新疆维吾尔自治区 乌鲁木齐(830011)

【摘要】 目的 比较耳周V形切口与改良Blair切口应用于腮腺浅叶良性肿瘤切除术的效果,为评估耳周V形切口的临床应用价值提供依据。方法 本研究已通过单位伦理委员会审查批准,并获得患者知情同意。回顾性收集2021年9月至2023年9月就诊于新疆维吾尔自治区人民医院的61例腮腺浅叶良性肿瘤患者,肿瘤最大直径不超过4 cm,根据手术切口不同分为2组,耳周V形切口组(29例)与改良Blair切口组(32例)。比较两组患者的手术时间、术后引流液总量;随访6个月,比较两组患者的面神经功能、术区疼痛及并发症发生情况和手术切口的美观效果;再根据61例患者肿瘤生长位置的不同分为耳垂周围肿瘤和腮腺下极肿瘤,对比两组切口应用于腮腺两部位肿瘤切除的手术时间。结果 两组切口手术时间、术后House-Brackmann面神经功能评分(House-Brackmann grading system, HBGs)和视觉模拟疼痛评分(visual analogue scale, VAS)无明显差异($P > 0.05$)。术后引流量和温哥华瘢痕量表评分(Vancouver scar scale, VSS):耳周V形切口组高于改良Blair切口组($P < 0.05$);耳周麻木发生率:耳周V形切口组低于改良Blair切口组($P < 0.05$);耳垂周围肿瘤切除的手术时间:耳周V形切口组短于改良Blair切口组($P < 0.05$)。结论 耳周V形切口作为面部隐蔽切口,但部分患者术后引流量较大,耳后区易发生瘢痕增生的情况,需要医生增强防范意识。

【关键词】 腮腺肿瘤; 耳周V形切口; 隐蔽切口; 负压引流; 术后引流量; 耳周麻木; 耳后沟; 瘢痕增生

【中图分类号】 R78 **【文献标志码】** A **【文章编号】** 2096-1456(2025)04-0289-07

【引用著录格式】 伍诗涵, 热依汉古力·穆合塔尔, 阿地拉·阿布力孜, 等. 耳周V形切口与改良Blair切口入路切除腮腺浅叶良性肿瘤的疗效比较[J]. 口腔疾病防治, 2025, 33(4): 289-295. doi:10.12016/j.issn.2096-1456.202440249.

Comparison of the efficacy of the V-shaped incision and modified Blair incision approach for resection of benign tumors in the superficial lobe of the parotid gland WU Shihan^{1,2}, MUHETAER Reyihanguli^{1,2}, ABULIZ Adila^{1,2}, YANG Rong^{1,2}, XU Hui².

1. Postgraduate College of Xinjiang Medical University, Urumqi 830011, China; 2. Department of Oral and Maxillofacial Surgery, People's Hospital of Xinjiang Uygur Autonomous Region, Urumqi 830011, China

Corresponding authors: XU Hui, Email: omsxuhui@139.com, Tel: 86-991-8563753

【Abstract】 Objective To evaluate the feasibility of a V-shaped incision in the resection of a superficial parotid gland benign tumor by comparison with a modified Blair incision. To provide a basis for evaluating the clinical application value of the V-shaped incision. **Methods** This study was reviewed and approved by the ethics committee, and informed consent was obtained from the patients. Data from 61 patients with a benign tumor on the superficial parotid gland who had surgery at People's Hospital of Xinjiang Uygur Autonomous Region from September 2021 to September 2023 were collected and analyzed. The maximum diameter of the tumor included in the patient should not exceed 4 cm. The patients were divided into two groups based on the different surgical incisions: a V-shaped incision group (29 cases)

【收稿日期】 2024-07-05; **【修回日期】** 2025-01-19

【基金项目】 “天山英才”医药卫生高层次人才培养计划(TSYC202301A049)

【作者简介】 伍诗涵, 硕士研究生, Email: 2780422932@qq.com

【通信作者】 许辉, 主任医师, 博士, Email: omsxuhui@139.com, Tel: 86-991-8563753



微信公众号

and modified Blair incision group (32 cases). Several comparisons were made between the group: operation time; postoperative drainage volume; facial nerve function, pain, and complication in the operation area; and aesthetic effect of the surgical incision. The patients were followed up for 6 months. The 61 patients were further divided into groups based on the locations of the tumors: tumors around the earlobe and tumors in the lower pole of the parotid gland. **Results** There were no significant differences in operation time, postoperative House-Brackmann grading system (HBGs) facial nerve function score, and visual analogue scale (VAS) pain score between the two groups ($P > 0.05$). The postoperative drainage volume and Vancouver scar scale (VSS) score of the V-shaped incision group were higher than the modified Blair incision group ($P < 0.05$). The incidence of great auricular nerve numbness was lower in the V-shaped incision group than the modified Blair incision group ($P < 0.05$). The operation time of the V-shaped incision applied to excise the tumor around the earlobe was shorter than the modified Blair incision ($P < 0.05$). **Conclusion** The V-shaped incision is a concealed facial incision, surgeons should be aware that some patients who receive this incision have a large amount of postoperative drainage and the retroauricular region is prone to scar hyperplasia.

【Key words】 parotid gland tumor; V-shaped incision; concealed incision; negative pressure drainage; postoperative drainage volume; periauricular numbness; retro auricular sulcus; hypertrophic scar

J Prev Treat Stomatol Dis, 2025, 33(4): 289-295.

【Competing interests】 The authors declare no competing interests.

This study was supported by the grants from “Tianshan Talents” High-level Medical and Health Personnel Training Program (No. TSYC202301A049).

唾液腺肿瘤 80% 发生于腮腺,腮腺肿瘤中约 80% 为良性^[1],目前临床上治疗手段仍以手术切除为主^[2]。改良 Blair 切口是一种经由面颈部的“S”形切口,作为临床上应用最广泛的腮腺切口设计,可提供的手术视野范围大,但术后面颈部留下长而明显的瘢痕,会影响患者的面容美观^[3]。随着医学技术的发展,腮腺手术切口不断被探索^[4-5]。耳周 V 形切口以耳垂为交点围绕耳屏前和耳后沟组成,因良好的美观效果被应用于腮腺手术^[6]。已有报道表明耳周 V 形切口避免了改良 Blair 切口面颈部的瘢痕问题^[7-8],且切口具备更好的隐蔽性及美观性^[9-10]。但耳周作为头颈部瘢痕疙瘩的好发区域^[11-12],V 形切口应用于腮腺肿瘤切除的安全性及术后长期疗效,尤其耳后沟区病理性瘢痕的防范、治疗尚未被关注。本课题组前期报告了耳周 V 形切口术后耳后沟区出现瘢痕增生及瘢痕疙瘩的案例^[13]。本研究拟探讨 V 形切口与改良 Blair 切口应用于腮腺浅叶良性肿瘤切除术的临床效果,为进一步评估耳周 V 形切口的临床应用价值提供依据。

1 资料和方法

1.1 临床资料

回顾性收集 2021 年 9 月至 2023 年 9 月新疆维吾尔自治区人民医院接受手术治疗的腮腺浅叶良性肿瘤患者,病例纳入标准:①术前影像学资料确认肿瘤位于腮腺浅叶且为单侧;②术前无面神经

受累症状;③腮腺区无瘢痕者;④肿物最大直径不超过 4 cm;⑤腮腺及颈部区域无手术史或放疗史;⑥术后病理检查提示为腮腺良性肿瘤。本研究已通过新疆维吾尔自治区人民医院伦理委员会的批准(KY2023020956),并取得了患者的知情同意。共纳入符合以上标准患者 61 例,依照肿瘤生长位置的不同分为耳垂周围肿瘤和腮腺下极肿瘤。根据手术切口不同分为 2 组,①耳周 V 形切口组(29 例),其中男 13 例,女 16 例,年龄 22~69 岁,平均年龄 47 岁,其中耳垂周围肿瘤 16 例,腮腺下极肿瘤 13 例;②改良 Blair 切口组(32 例),其中男 16 例,女 16 例,年龄 23~71 岁,平均年龄 49 岁,其中耳垂周围肿瘤 10 例,腮腺下极肿瘤 22 例,两组患者性别、年龄、肿瘤生长位置的差异无统计学意义($P > 0.05$)(表 1)。

1.2 治疗方法

①耳周 V 形切口组:患者全身麻醉后取水平仰卧位,头部偏向健侧,在患侧腮腺区,切口沿耳前切迹,向内转至耳屏缘内侧向下至耳屏间切迹,沿耳垂前方皮纹向下走行,绕过耳垂后沿耳后沟向上走行止于乳突处。切开皮肤、皮下组织、腮腺咬肌筋膜及胸锁乳突肌。在腮腺咬肌筋膜表面锐性翻瓣,当皮瓣掀至腮腺前缘时改用钝性分离;根据肿瘤的位置选择面神经顺行解剖法或逆行解剖法,对耳大神经进行保护,游离其耳后支和耳垂

表1 耳周V形切口组与改良Blair切口组的患者基本资料

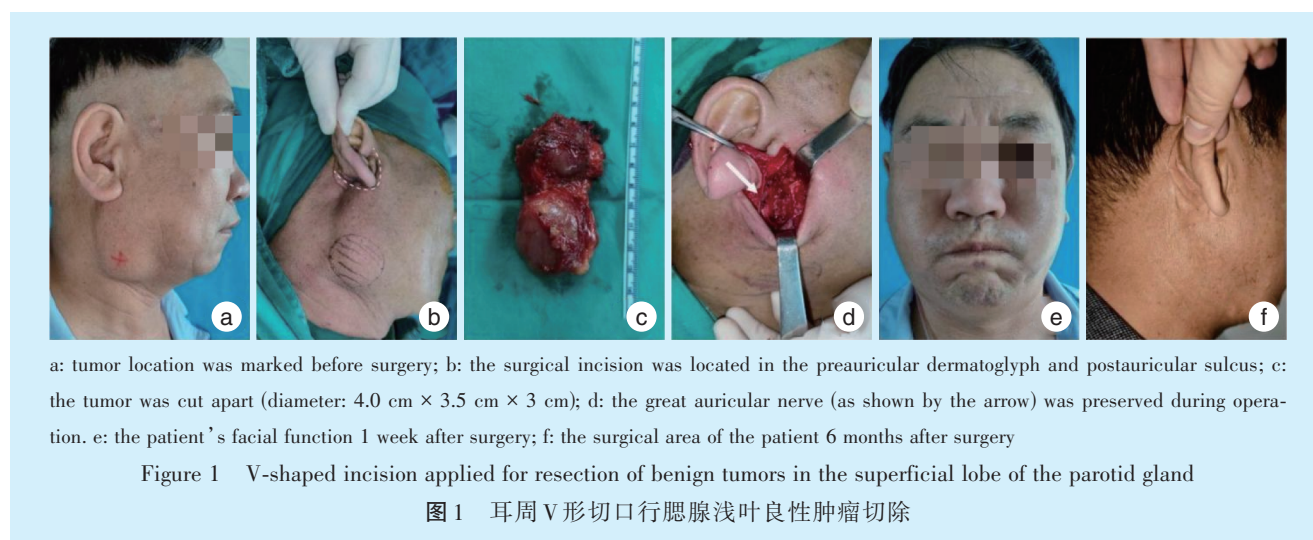
Table 1 The basic data of patients in the V-shaped incision group and the modified Blair incision group $\bar{x} \pm s$

Group	n	Age/years	Gender		Location of the tumor	
			Male	Female	Around the earlobe	Lower pole of parotid gland
V-shaped incision	29	47.03 ± 12.88	13	16	16	13
Modified Blair incision	32	48.69 ± 14.23	16	16	10	22
χ^2/t		-0.47	0.16		3.56	
P		0.64	0.69		0.06	

支,切断进入腮腺的耳前支。行腮腺浅叶部分切除:将腮腺肿瘤及周围部分腮腺组织一并切除,确保无活动性出血点后,将生物膜缝合固定于腮腺残端,负压引流管置入术区残腔。可吸收线分层对位缝合腮腺筋膜、皮下组织,不可吸收线连续缝合皮肤。术后3 d引流量小于5 mL时撤除负压引

流管,术区加压包扎,术后1周拆线(图1)。

②改良Blair切口组:切口起自耳屏前颧弓根部,平行于纵向皮纹,向下走行绕过耳垂后沿下颌升支后缘顺下颌角方向向前延伸。切开皮肤、皮下组织、腮腺咬肌筋膜及颌下区的颈阔肌,术中保护耳大神经,其余步骤同耳周V形切口组。



1.3 评价指标

①围术期指标:手术时间、术后引流总量;术后1周依据House-Brackmann面神经功能评估表(House-Brackmann grading system, HBGs)对患者进行第1次面神经损伤评分。将面神经受损情况分为4个等级(2~10分),评估为IV级(6分)以上的患者将诊断为术后面瘫。②术后3个月指标:患者依据视觉模拟量表(visual analogue scale, VAS),对手术区域进行疼痛评分,分数越小,疼痛程度越低;进行第2次面神经损伤评分。③术后6个月指标:医生依据温哥华瘢痕评价量表(Vancouver scar scale, VSS)对患者手术切口进行瘢痕评分,从瘢痕的血管色泽、皮肤色泽、瘢痕厚度和柔软度4个方面(0~15分)进行评分,分数越高,瘢痕越明显;进行第3次面神经损伤评分,若面神经损伤仍未恢复则视为永久性面瘫。

记录患者术后6个月内面瘫、耳周麻木、术区凹陷血肿、感染、伤口裂开、皮肤坏死、涎瘘、瘢痕增生、味觉出汗综合征等并发症的发生及恢复情况。为保证研究的同质性,2组手术均由具备丰富腮腺手术经验的外科医生施行,术后评价由经过培训的医生对病人进行随机且独立的单盲法评价。

1.4 统计学分析

应用SPSS25.0统计学软件处理数据。计量资料符合正态分布采用均数±标准差描述,组间比较采用独立样本t检验分析;计量资料非正态分布采用中位数(25分位数,75分位数)描述,组间比较采用Mann-Whitney U检验。分类资料用例数和百分数(%)表示,组间比较用卡方检验和Fisher精确检验。等级资料组间比较用Mann-Whitney U检验。以P<0.05为差异有统计学意义。

2 结果

患者手术均顺利完成,达到 I 期愈合,无失访病例。两组患者手术时间、HBGs 面神经功能评分和 VAS 疼痛评分及并发症发生率均无明显差异 ($P > 0.05$)。随访 6 个月内,耳周 V 形切口组并发症共 7 例 (24.1%),改良 Blair 切口组共 13 例 (40.6%),其中暂时性面瘫、涎漏两组各出现 1 例;瘢痕增生:耳周 V 形切口组出现 3 例(图 2),改

良 Blair 切口组出现 1 例;耳周麻木:耳周 V 形切口组出现 2 例(术后 6 月仍未恢复),改良 Blair 切口组出现 10 例(其中 4 例在术后 6 月后仍未恢复)。术后引流量和 VSS 瘢痕评分:耳周 V 形切口组均高于改良 Blair 切口组,差异有统计学意义 ($P < 0.05$)。耳周 V 形切口组中耳垂周围肿瘤切除的手术时间,短于改良 Blair 切口组 ($P < 0.05$)(表 2)。



Figure 2 Prevention and treatment of V-shaped incision postoperative scar hyperplasia

图 2 耳周 V 形切口术后瘢痕增生的预防及治疗

表 2 耳周 V 形切口组与改良 Blair 切口组的患者术后评分及并发症对比

Table 2 Comparison of postoperative scores and complications between patients in the V-shaped incision group and the modified Blair incision group

Items	VI (n = 29)	MBI (n = 32)	$\chi^2/t/Z$	P
Operation time/min, $\bar{x} \pm s$	124.07 ± 43.08	134.50 ± 43.57	-0.94	0.35
Operative time for resection of tumor around the earlobe/min, $\bar{x} \pm s$	107.56 ± 26.86	140.00 ± 44.41	-2.33	0.03
Operative time for resection of tumor on lower pole of parotid gland/min, $\bar{x} \pm s$	144.38 ± 51.16	132.00 ± 44.00	0.76	0.45
Postoperative drainage volume/mL, $\bar{x} \pm s$	62.60 ± 59.55	37.25 ± 22.18	2.16	0.04
HBGs, $M(Q_{25}, Q_{75})$	0 (0, 2)	0 (0, 2)	0.00	1.00
VAS, $M(Q_{25}, Q_{75})$	1 (0, 1)	0 (0, 1)	-0.70	0.48
VSS, $M(Q_{25}, Q_{75})$	0 (0, 2)	0 (0, 0)	-2.12	0.03
Postoperative complication, n(%)	7 (24.1)	13 (40.6)	1.87	0.17
Temporary facial paralysis	1	1	#	1.00
Postoperative salivary fluid retention	1	1	#	1.00
Hypertrophic scar	3	1	0.38	0.54
Periauricular numbness	2	10	5.71	0.02

Both groups were used partial superficial parotidectomy. VI: V-shaped incision group; MBI: modified Blair incision group; HBGs: House-Brackmann facial nerve function assessment scale; VAS: visual analogue pain scale; VSS: Vancouver scar scale. # is Fisher's exact test

3 讨论

腮腺浅叶切除术(superficial parotidectomy, SP)作为腮腺良性肿瘤切除的金标准^[14],可降低肿瘤的复发率^[15],腮腺浅叶部分切除术(partial superficial parotidectomy, PSP)并发症发生率则更低,手术时间更短^[16-17],能更好地保留面神经功能^[18]。本研究中两组均采用腮腺浅叶部分切除术,HBGs 评分、VAS 评分及手术时间无明显差异,但耳周 V 形切口组应用于耳垂周围肿瘤切除的手术时间明显

短于改良 Blair 切口组,由于耳周 V 形切口仅涉及耳垂前后,相较于改良 Blair 切口涉及的耳前及颌下区域,术中翻瓣范围减少,手术时间缩短。

有研究表明腮腺浅叶部分切除术后涎漏的发生率高达 10.6%^[19],本研究结果显示耳周 V 形切口组术后引流量显著高于改良 Blair 切口组,原因在于耳周 V 形切口较改良 Blair 切口相比,切口更短,切除腮腺下极肿瘤时术野局限,造成腮腺叶间导管结扎困难,腮腺实质关闭不完全,术后剩余腮腺

组织分泌的唾液通过叶间导管排入并滞留于创口内也可从关闭不全的腮腺实质边缘溢入创口,导致术后引流量增多^[19-20]。以往研究中,耳周V形切口术后引流量显著少于改良Blair切口,主要与耳周V形切口解剖翻瓣范围小,手术创伤小,尽量保存了正常的腮腺组织有关^[21]。引流量过大会提高涎漏及感染的发生率,为避免上述情况出现,术中仔细结扎腮腺分支导管,恰当缝扎残留腺体断面,术后运用负压引流并保持通畅皆为必要^[20,22]。若引流点高于引流区局部会更容易造成积液滞留,拔除负压引流管时,注意尽量排除积液;术区加压包扎涉及耳廓的阻挡导致组织瓣贴合不够紧密时,需重点对患者的肿瘤切除区域进行加压包扎。若负压引流装置能确保组织瓣的贴合,为减轻患者不适感可不必采用加压包扎^[23]。

本研究中,耳周V形切口组的耳周麻木发生情况低于改良Blair切口组。耳周麻木的发生与耳大神经受损相关^[24-25]。耳大神经体表投影为胸锁乳突肌锁骨起点与乳突连线的上1/3段,位置表浅,神经粗大走行较恒定,分为耳前支、耳垂支和耳后支,其主干位于颈外静脉后方1.0 cm^[26],主干的末段及分支的起始段皆分布于腮腺筋膜浅层表面。理论上,耳周V形切口更容易在翻瓣过程中损伤走行于耳后切口处胸锁乳突肌表面的耳大神经,而改良Blair切口位置与耳大神经相对远,当瘤体远离耳大神经时,可不必对耳大神经进行翻瓣游离。本研究中改良Blair切口组耳大神经受损情况更多,主要与术者对耳大神经的保护重视程度不足有关,但耳周V形切口组相对狭小的手术视野,并未妨碍术者对耳大神经进行分离。为防止耳周麻木的发生,术中对耳大神经进行游离并保留其主干十分关键^[26]。术中牺牲耳大神经会导致术后感觉障碍,5%的患者耳垂区会出现永久性麻木,甚至发生神经性假瘤^[27]。虽然耳大神经后支牺牲,耳颞神经、枕小神经、颈横神经支配的侧支神经后期可代偿其功能,改善术后不适^[28]。但外科医生仍逐渐重视对耳大神经的保留及保护^[29-30],并将其作为判断手术是否精良的标准之一,以体现腮腺功能性外科。

本研究中耳周V形切口组VSS评分明显高于改良Blair切口组,且术后耳后瘢痕增生的发生率也大于改良Blair切口组。这与切除腮腺下极肿瘤时为暴露耳后区手术视野,强力牵拉耳后沟皮肤相关^[31],病理性瘢痕产生的危险因素之一就是机

械力的牵拉^[32],局部组织渗血渗液也可能加重瘢痕的色素沉着。以往研究中,耳周V形切口VSS评分显著低于改良Blair切口,主要与耳周V形切口顺皮纹走向,缝合张力较低,瘢痕程度较轻有关^[21]。耳周V形切口组VSS评分虽高,但由于其耳前切口处于面部与耳垂和耳轮脚的交界处,此处皮肤相对松弛,且切口平行于纵向皮纹,所以瘢痕隐秘^[33],即使耳后区易出现瘢痕增生,有耳廓的遮挡,也不易发现^[34]。改良Blair切口组的VSS评分虽低,但颈部留下的S形瘢痕却显而易见,因此认为耳周V形切口作为隐蔽切口,美观效果更好。但需要注意的是:耳周、下颌角区皆为面颈部瘢痕疙瘩的好发区域^[11,35],耳后沟处薄且柔软的皮肤以及胸锁乳突肌参与头部姿势变化从而改变此处皮肤力学性能,皆为该处瘢痕疙瘩好发的原因^[35]。除物理因素及患者体质的缘故,妊娠期女性孕激素的变化及高血压导致的血管内皮功能障碍也会提高病理性瘢痕的发生率^[32,36-37]。因此选择该切口时,应对肿物的形态位置进行评估^[38],并加强对瘢痕易感人群的术后护理。在随访中笔者发现术后瘢痕的恢复效果与患者的性别、年龄、经济状况也相关:老年患者的皮肤松弛且常伴有色素沉着,术后瘢痕更容易与周围皮肤融为一体,不易发现;年轻女性患者相较于中年男性,更加服从医嘱,也更重视瘢痕的护理,瘢痕恢复效果明显好于中年男性。为避免耳周V形切口病理性瘢痕的产生,术中注意:牵拉皮瓣暴露耳后术野时勿用力过猛,并修剪受到拉伤损害的皮肤边缘^[13]。在创口闭合时注意减轻组织张力,可先将皮瓣固定于乳突的骨膜上,后实现无张力的皮肤缝合^[34]。利用内镜的照明与放大作用,辅助肿瘤切除时可取得更清晰的术野,更好的美观效果^[10,26]。术后注意保持术区干燥,负压引流时间不长于5 d^[22],并进行瘢痕护理。若术后出现瘢痕疙瘩,首选手术切除结合术后放疗^[39-41]。

耳周V形切口应用于腮腺浅叶良性肿瘤切除是安全、可靠的。在不增加手术时间及并发症发生率的情况下,可以减小手术创伤。适用于耳垂周围直径小于4 cm的肿瘤切除,因为手术时间更短并具备更好的疗效;但肿瘤位于腮腺下极时,翻瓣范围及牵拉损伤相对大,术野也更为局限,外科医生手术经验不足反而会增加并发症的发生,因此不推荐初学者使用,此时选择改良Blair切口更为合适^[42]。

综上所述,耳周V形切口作为面部隐蔽切口,具备美观性,但选择该切口时要注意适应证的选择以及耳后区瘢痕的防治,并在术后进行精心维护,以此达到长久的美学效果。

【Author contributions】 Wu SH processed the research, and wrote the article. Muhetaer RYHGL analyzed the data and revised the article. Xu H designed the study and reviewed the article. Abulizi ADL and Yang R revised the article. All authors read and approved the final manuscript as submitted.

参考文献

- [1] 王张嵩, 谢舒乐, 张汉卿, 等. 2 456例唾液腺肿瘤临床病理分析[J]. 口腔疾病防治, 2020, 28(5): 298-302. doi: 10.12016/j.issn.2096-1456.2020.05.005.
Wang ZS, Xie SL, Zhang HQ, et al. Clinical and pathological analysis of 2 456 cases of salivary gland tumor[J]. J Prev Treat Stomatol Dis, 2020, 28(5): 298-302. doi: 10.12016/j.issn.2096-1456.2020.05.005.
- [2] Jeong SH, Kim HY, Lee DH, et al. Facial nerve neurotization due to unexpected facial nerve injury during parotid gland tumor surgery[J]. Eur Arch Otorhinolaryngol, 2020, 277(8): 2315-2318. doi: 10.1007/s00405-020-05931-x.
- [3] Yin S, Han Y, Liu Y, et al. Comparison of various surgical incisions in parotidectomy: a systematic review and network meta-analysis[J]. Front Oncol, 2022, 12: 972498. doi: 10.3389/fonc.2022.972498.
- [4] Ahn D, Lee GJ, Sohn JH. Individualized use of facelift, retroauricular hairline, and V-shaped incisions for parotidectomy[J]. J Oral Maxillofac Surg, 2020, 78(12): 2339.e1-2339.e8. doi: 10.1016/j.joms.2020.08.021.
- [5] Colaianni CA, Richmon JD. Cosmetic approaches to parotidectomy[J]. Otolaryngol Clin North Am, 2021, 54(3): 583-591. doi: 10.1016/j.otc.2021.02.010.
- [6] Roh JL. Functional gland-preserving surgery via periauricular incision for pleomorphic adenoma of the parotid gland[J]. Eur J Surg Oncol, 2022, 48(1): 21-26. doi: 10.1016/j.ejso.2021.08.030.
- [7] Roh JL. Extracapsular dissection of benign parotid tumors using a retroauricular hairline incision approach[J]. Am J Surg, 2009, 197(5): e53-e56. doi: 10.1016/j.amjsurg.2008.06.040.
- [8] Colaianni CA, Feng AL, Richmon JD. Partial parotidectomy via periauricular incision: retrospective cohort study and comparative analysis to alternative incisional approaches[J]. Head Neck, 2021, 43(3): 825-832. doi: 10.1002/hed.26542.
- [9] 吴平凡, 陈林林, 陈芬, 等. 耳后隐蔽切口入路切除腮腺下极良性肿瘤疗效评价[J]. 口腔疾病防治, 2020, 28(12): 781-784. doi: 10.12016/j.issn.2096-1456.2020.12.005.
Wu PF, Chen LL, Chen F, et al. Removal of benign tumor in the lower pole of the parotid gland through concealed incision in the retroauricular sulcus[J]. J Prev Treat Stomatol Dis, 2020, 28(12): 781-784. doi: 10.12016/j.issn.2096-1456.2020.12.005.
- [10] Chen WL, Fan S, Zhang DM. Endoscopically assisted extracapsular dissection of pleomorphic adenoma of the parotid gland through a postauricular sulcus approach in young patients[J]. Br J Oral Maxillofac Surg, 2017, 55(4): 400-403. doi: 10.1016/j.bjoms.2017.01.010.
- [11] Wang JC, Fort CL, Hom DB. Location propensity for keloids in the head and neck[J]. Facial Plast Surg Aesthet Med, 2021, 23(1): 59-64. doi: 10.1089/fpsam.2020.0106.
- [12] Fuenmayor P, Quiñonez H, Salas R, et al. Outcomes of surgical excision and high-dose-rate brachytherapy for earlobe keloids[J]. World J Plast Surg, 2021, 10(1): 78-84. doi: 10.29252/wjps.10.1.78.
- [13] Wu S, Qi J, Abudunaibi M, et al. Letter to the Editor regarding, "Gland-preserving surgery of benign parotid tumors via postauricular sulcus incision: is it safe and effective with the scarless incision?" [J]. Oral Oncol, 2023, 146: 106559. doi: 10.1016/j.oraloncology.2023.106559.
- [14] Loke WL, Rahimi S, Brennan PA. An update on extracapsular dissection for the management of parotid gland pleomorphic adenoma [J]. J Oral Pathol Med, 2022, 51(3): 219-222. doi: 10.1111/jop.13251.
- [15] Roh JL. Superficial versus total parotidectomy for recurrent pleomorphic adenoma in the parotid gland[J]. Oral Oncol, 2022, 134: 106103. doi: 10.1016/j.oraloncology.2022.106103.
- [16] Li C, Matthies L, Hou X, et al. A meta-analysis of the pros and cons of partial superficial parotidectomy versus superficial parotidectomy for the treatment of benign parotid neoplasms[J]. J Cranio-maxillofac Surg, 2020, 48(6): 590-598. doi: 10.1016/j.jcms.2020.04.002.
- [17] Bhattacharya A, Singh M, Shah A, et al. Partial superficial parotidectomy for pleomorphic adenoma of the parotid gland[J]. BMJ Case Rep, 2021, 14(6): e238759. doi: 10.1136/bcr-2020-238759.
- [18] Ali HM, Keaton AB, Rourk K, et al. Partial superficial parotidectomy for pleomorphic adenoma of the parotid gland: early post-operative outcomes[J]. Am J Otolaryngol, 2024, 45(2): 104185. doi: 10.1016/j.amjoto.2023.104185.
- [19] Liu Y, Yuan W, Sun H, et al. Predictors of sialocele or salivary fistula after partial superficial parotidectomy for benign parotid tumor: a retrospective study[J]. J Oral Maxillofac Surg, 2022, 80(2): 327-332. doi: 10.1016/j.joms.2021.09.013.
- [20] Roh JL. Sialocele formation after partial parotidectomy: dependent on remnant parotid exposure[J]. Head Neck, 2023, 45(5): 1299-1304. doi: 10.1002/hed.27348.
- [21] 张文忠, 张思庆, 朱学芬, 等. 腮腺美容切口治疗腮腺肿瘤临床效果探讨[J]. 中国美容医学, 2022, 31(3): 83-86. doi: 10.15909/j.cnki.cn61-1347/r.004969.
Zhang WZ, Zhang SQ, Zhu XF, et al. Clinical effect of parotid gland cosmetic incision in the treatment of parotid gland tumor[J]. Chin J Aesthetic Med, 2022, 31(3): 83-86. doi: 10.15909/j.cnki.cn61-1347/r.004969.
- [22] 黄艳青, 孙辉, 李矛, 等. 负压引流时间对腮腺术后并发症发生的影响分析[J]. 中国美容医学, 2018, 27(4): 116-117. doi: 10.15909/j.cnki.cn61-1347/r.002337.
Huang YQ, Sun H, Li M, et al. Influence of negative pressure drainage time on postoperative complications in parotid gland[J].

- Chin J Aesthetic Med, 2018, 27(4): 116-117. doi: 10.15909/j.cnki.cn61-1347/r.002337.
- [23] Kruatreeraprit P, Tangjaturonrasme N, Samuckkeethum W. Utility of applying pressure dressing following parotidectomy compared to conventional dressing: a benefit or not?[J]. J Oral Maxillofac Surg, 2024, 82(7): 878-882. doi: 10.1016/j.joms.2024.03.038.
- [24] Zeng J, Li J, Saad M, et al. A review of surgical incisions used for the excision of benign parotid tumors[J]. Ann Plast Surg, 2024, 93 (2s suppl 1): S69-S74. doi: 10.1097/SAP.0000000000003932.
- [25] Committeri U, Arena A, Iaquinio V, et al. Surgical management and side effects of parotid gland surgery for benign lesions: a retrospective analysis of our experience from 2012 to 2021[J]. Br J Oral Maxillofac Surg, 2023, 61(6): 411 - 415. doi: 10.1016/j.bjoms.2023.03.011.
- [26] 潘朝斌, 林钊宇. 腮腺良性肿瘤诊断、手术方式及常见并发症的预防与处理[J]. 口腔疾病防治, 2022, 30(11): 761-768. doi: 10.12016/j.issn.2096-1456.2022.11.001.
- Pan CB, Lin ZY. Diagnosis and surgical approach of parotid gland benign tumors and treatment of common complications[J]. J Prev Treat Stomatol Dis, 2022, 30(11): 761 - 768. doi: 10.12016/j.issn.2096-1456.2022.11.001.
- [27] Laccourreye H, Laccourreye O, Cauchois R, et al. Total conservative parotidectomy for primary benign pleomorphic adenoma of the parotid gland: a 25-year experience with 229 patients[J]. Laryngoscope, 1994, 104(12): 1487 - 1494. doi: 10.1288/00005537 - 199412000-00011.
- [28] Sagalow ES, Givens AK, Gill K, et al. Impact of great auricular nerve sacrifice on sensory disturbance after parotidectomy[J]. Am J Otolaryngol, 2022, 43(2): 103387. doi: 10.1016/j.amjoto.2022.103387.
- [29] Troux C, Trandafir C, Zugun C, et al. Great auricular nerve conservation and parotidectomy for tumor[J]. Eur Ann Otorhinolaryngol Head Neck Dis, 2023, 140(3): 131 - 134. doi: 10.1016/j.anorl.2022.07.005.
- [30] Al-Aroomi MA, Mashrah MA, Zhou L, et al. Superficial parotidectomy with or without great auricular nerve preservation. Is there a difference in postoperative sensory recovery rates and quality of life? [J]. Br J Oral Maxillofac Surg, 2022, 60(7): 933 - 939. doi: 10.1016/j.bjoms.2022.01.007.
- [31] Roh JL. Gland-preserving surgery of benign parotid tumours via postauricular sulcus incision: is it safe and effective with the scarless incision? [J]. Oral Oncol, 2022, 127: 105808. doi: 10.1016/j.oraloncology.2022.105808.
- [32] Ogawa R, Okai K, Tokumura F, et al. The relationship between skin stretching/contraction and pathologic scarring: the important role of mechanical forces in keloid generation[J]. Wound Repair Regen, 2012, 20(2): 149-157. doi: 10.1111/j.1524-475X.2012.00766.x.
- [33] 吴平安, 梁伟英, 陆钊群, 等. 改良耳周切口在功能性腮腺切除术中的应用[J]. 临床耳鼻咽喉头颈外科杂志, 2017, 31(13): 995-997. doi: 10.13201/j.issn.1001-1781.2017.13.006.
- Wu PA, Liang WY, Lu ZQ, et al. Functional modified periauricular incision in parotidectomy[J]. J Clin Otorhinolaryngol Head Neck Surg, 2017, 31(13): 995 - 997. doi: 10.13201/j.issn.1001 - 1781.2017.13.006.
- [34] Burgaz I, Miao H, Chang Y, et al. Is this novel incision for benign parotid tumors the answer for improved esthetics and access? [J]. J Maxillofac Oral Surg, 2022, 21(4): 1304 - 1310. doi: 10.1007/s12663-021-01605-1.
- [35] Cho H, Dohi T, Wakai H, et al. In the face and neck, keloid scar distribution is related to skin thickness and stiffness changes associated with movement[J]. Wound Repair Regen, 2024, 32(4): 419-428. doi: 10.1111/wrr.13180.
- [36] Ibrahim NE, Shaharan S, Dheansa B. Adverse effects of pregnancy on keloids and hypertrophic scars[J]. Cureus, 2020, 12(12): e12154. doi: 10.7759/cureus.12154.
- [37] Ogawa R, Akaiishi S. Endothelial dysfunction may play a key role in keloid and hypertrophic scar pathogenesis - keloids and hypertrophic scars may be vascular disorders[J]. Med Hypotheses, 2016, 96: 51-60. doi: 10.1016/j.mehy.2016.09.024.
- [38] Levy D, Ronen O. Assessment of a limited-access parotidectomy technique's complications and scar characteristics-a cohort study [J]. J Plast Reconstr Aesthet Surg, 2022, 75(12): 4416-4422. doi: 10.1016/j.bjps.2022.08.066.
- [39] Wang W, Zhao J, Zhang C, et al. Current advances in the selection of adjuvant radiotherapy regimens for keloid[J]. Front Med(Lausanne), 2022, 9: 1043840. doi: 10.3389/fmed.2022.1043840.
- [40] Ogawa R. The most current algorithms for the treatment and prevention of hypertrophic scars and keloids: a 2020 update of the algorithms published 10 years ago[J]. Plast Reconstr Surg, 2022, 149 (1): 79e-94e. doi: 10.1097/PRS.00000000000008667.
- [41] 伍诗涵, 阿地拉·阿布力孜, 许辉. 耳垂瘢痕疙瘩的形成机制及临床治疗研究进展[J]. 中国美容医学, 2024, 33(10): 183-187. doi:10.15909/j.cnki.cn61-1347/r.006535.
- Wu SH, Adila·ABULIZI, Xu H Research progress on formation mechanism and clinical treatment of earlobe keloid[J]. Chin J Aesthetic Med, 2024, 33(10): 183-187. doi:10.15909/j.cnki.cn61-1347/r.006535.
- [42] 李蒙蒙, 李仕晟, 唐青来, 等. 耳周V形切口腮腺浅叶切除术可行性及疗效观察[J]. 中华耳鼻咽喉头颈外科杂志, 2020, 55(7): 658-663. doi: 10.3760/cma.j.cn115330-20191109-00678.
- Li MM, Li SS, Tang QL, et al. Feasibility and efficacy of partial superficial parotidectomy with V-shaped incision[J]. Chin J Otorhinolaryngol Head Neck Surg, 2020, 55(7): 658-663. doi: 10.3760/cma.j.cn115330-20191109-00678.

(编辑 周春华)



Open Access

This article is licensed under a Creative Commons Attribution 4.0 International License.

Copyright © 2025 by Editorial Department of Journal of Prevention and Treatment for Stomatological Diseases



官网