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改良型腮腺切除术治疗腮腺肿瘤的效果观察及对血清 CA125、β_2-MG 水平的影响 *

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摘要 目的:分析改良型腮腺切除术治疗腮腺肿瘤的效果及对血清糖链抗原 125(CA125)、β_2 微球蛋白(β_2-MG)水平的影响。**方法:**选择 2016 年 12 月 -2019 年 12 月我院收治的腮腺肿瘤患者 80 例纳入本次研究，采用随机数表法分为观察组 (n=41) 和对照组(n=39)。对照组使用传统腮腺切除术进行治疗,观察组采用改良型腮腺切除术进行治疗。比较两组患者手术情况、手术前后血清 CA125、β_2-MG、生活质量评分的变化及面部神经损伤和并发症的发生情况。**结果:**两组手术时间、术中出血量及术后当日引流量比较均无显著差异;观察组住院时间、手术切口长度均显著低于对照组(P<0.05);治疗后,两组血清 CA125、β_2-MG 水平均较治疗前显著下降,且观察组低于对照组(P<0.05);观察组面部神经总损伤率为 12.20%,显著低于对照组(35.90%,P<0.05)。治疗后,两组生活质量评分均较治疗前显著升高,且观察组显著高于对照组(P<0.05);两组并发症总发生率分别为 9.76%、28.21%,差异显著(P<0.05)。**结论:** 采用改良型腮腺切除术治疗腮腺肿瘤患者的临床效果显著，且安全性高，并可有效改善患者生活质量，降低 CA125、β_2-MG 水平。

关键词:改良型腮腺切除术;腮腺肿瘤;糖链抗原 125;β_2 微球蛋白

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Efficacy of Modified Parotid Gland Resection in the Treatment of Parotid Gland Tumor and Its Effects on the Serum CA125 and β_2-MG Levels*

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ABSTRACT Objective: To study the efficacy of modified parotid gland resection in the treatment of parotid gland tumor and its effect on the serum Glycemic chain antigen 125 (CA125), β_2-MG(lob2-mg) levels. **Methods:** 80 cases of parotid gland tumor patients admitted to our hospital from December 2016 to December 2019 were included in this study, and were randomly divided into the observation group (n=41) and the control group (n=39). The control group was treated with traditional parotidectomy, while the observation group was treated with modified parotidectomy. The operation status, changes of serum CA125, livelihood quality score before and after operation, and incidence of facial nerve injury and complications were compared between two groups. **Results:** There was no significant difference between the two groups in operation time, intraoperative blood loss and postoperative daily drainage volume. The length of hospital stay and incision length in the observation group were significantly lower than those in the control group (P<0.05). After treatment, the serum levels of CA125 and 2-mg in both groups were significantly lower than that before treatment, and the observation group was lower than the control group (P<0.05). The total facial nerve injury rate in the observation group was 12.20%, significantly lower than that in the control group (35.90%, P<0.05). After treatment, the quality of life scores of both groups were significantly higher than before treatment, and the observation group was significantly higher than the control group (P<0.05). The total incidence of complications in the two groups was 9.76% and 28.21%, respectively, with significant differences (P<0.05).**Conclusion:** Modified parotid gland resection for parotid gland tumor patients has significant clinical effect with high safety, and can effectively improve the quality of life, as well as reduce the level of CA125, β_2-MG.

Key words: Modified parotidectomy; Parotid gland neoplasm; Carbohydrate antigen 125; β_2 microglobulin

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前言

腮腺肿瘤是头颈部常见疾病,80%以上是良性肿瘤，生长缓慢,临床症状不明显,病程可达数年甚至数十年之久,主要会对患者面部外形和面部神经功能产生影响,且良性肿瘤有恶变可能,因此早期及时有效的治疗具有重要意义[1,2]。手术切除是

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目前治疗腮腺肿瘤的有效方法之一，但腮腺肿瘤与面神经有密切的关系，术中若造成面神经损伤可导致面瘫，出现术后口眼歪斜等，严重影响患者的生活质量[3]。传统腮腺切除术为经耳屏前绕下颌后至上颈部的 "S" 形切口，对患者影响较大，且术后有些患者会暂时性面瘫，同时对患者腮腺分泌功能影响较大[4,5]。

近年来，随着医疗技术的发展，腮腺切除术也逐渐得到改进，改良型腮腺切除术切口线隐蔽，有较高的安全性，能降低腮腺形态和功能的损害[6]。有研究显示血清 CA125 与口腔颌面部肿瘤关系密切，检测其水平能更好反映口腔颌面部恶性肿瘤的发生，当发生腮腺肿瘤时，这个水平不能反映腮腺肿瘤的存在，但是唾液样本可以[7]。β_2-MG 于多种恶性肿瘤的发生有关，但其在口腔颌面部肿瘤中的研究较少[8]。因此，本研究主要探讨了改良型腮腺切除术治疗腮腺肿瘤的效果及其对血清 CA125、β_2-MG 水平的影响。。

1 资料与方法

1.1 一般资料

选择 2016 年 12 月 -2019 年 12 月我院收治的腮腺肿瘤患者 80 例纳入本次研究，采用随机数表法将其分为两组。观察组41 例，包括男 23 例，女 18 例；年龄 16~73 岁，平均(50.49±14.96)岁，病程 7~25 月，平均(14.36±4.22)月，肿瘤直径 2 cm~3 cm，平均(2.26±0.12)cm，其中左侧 22 例，右侧 19 例；对照组 39 例，包括男 25 例，女 14 例，年龄 17~81 岁，平均(49.46±15.34)岁，病程 7~23 月，平均(14.31±4.18)月，肿瘤直径 1.9 cm~3 cm，平均(2.24±0.13)cm，其中左侧 23 例，右侧 16 例。两组一般资料比较无显著差异(P>0.05)，可比较。

纳入标准：(1)首次腮腺手术患者；(2)临床资料完整；(3)病历检查确诊为腮腺肿瘤；(4)术前无面瘫症状；(5)患者知情且签署同意书。排除标准：(1)重症者；(2)神志不清者；(3)合并重要脏器功能障碍者；(4)合并血液性疾病患者；(5)凝血功能障碍者；(6)依从性较差者。

1.2 治疗方法

对照组采用传统腮腺切除术：全麻后，颌后做 S 形切口，切除腮腺浅叶及肿瘤，不保留腮腺管，结扎腮腺残端，常规放置引流管后清洗结束操作。观察组采用改良型腮腺切除术：患者全麻后，颌后做倒 S 形切口，锐性分离腮腺筋膜浅面、咬肌筋膜，充分显露肿瘤后，将腮腺浅叶组织及肿瘤全部切除。保留腮腺前部及上部腺体及腮腺管，放置引流管，常规清洗结束操作。

1.3 观察指标

采集空腹静脉血 5 mL，采用双抗体夹心酶联免疫吸附法测 CA125、β_2-MG 水平；生活质量：100 分为满分，得分越高说明代表生活质量越高；记录手术情况、面部神经损伤情况及并发症的发生情况。

1.4 统计学分析

数据处理采用 spss18.0 软件，手术情况、血清 CA125、β_2-MG、生活质量评分指标以($\bar{x}\pm s$)表示，t 检验，计数资料以率表示，χ^2 检验，以 $P<0.05$ 为差异具有统计学意义。。

2 结果

2.1 观察组与对照组手术情况的比较

观察组与对照组手术时间、术中出血量及术后当日引流量比较无显著差异(P>0.05)；观察组住院时间、手术切口长度均显著低于对照组(P<0.05)，见表 1。

表 1 观察组与对照组手术情况的比较($\bar{x}\pm s$)

Table 1 Comparison of the surgical conditions between the two groups($\bar{x}\pm s$)

Groups	n	Operation time (min)	Intraoperative blood loss (mL)	Volume of drainage on postoperative day (mL)	Hospital stay (d)	Surgical incision (cm)
Observation group	41	81.01±2.13	85.31±8.13	30.12±2.19	7.14±1.35	3.14±1.07
Control group	39	80.97±2.35	88.34±9.24	29.97±2.04	12.05±2.03	6.36±1.06
T value		0.079	1.559	0.317	13.970	13.515
P value		0.937	0.123	0.752	0.000	0.000

2.2 观察组与对照组血清 CA125、β_2-MG 水平的比较

治疗后，观察组与对照组血清 CA125、β_2-MG 水平均较治疗前显著下降，且观察组低于对照组(P<0.05)，见表 2。

2.3 观察组与对照组面部神经损伤发生情况的比较

观察组与对照组面部神经总损伤率为 12.20%、35.90%，差异显著(P<0.05)，见表 3。

2.4 观察组与对照组生活质量评分的比较

治疗后，观察组与对照组生活质量评分水平均较治疗前显著升高，且观察组高于对照组(P<0.05)，见表 4。

表 2 观察组与对照组治疗前后血清 CA125、β 2-MG 水平的比较($\bar{x}\pm s$)

Table 2 Comparison of the serum CA125 and β_2-MG levels between the two groups before and after treatment($\bar{x}\pm s$)

Groups	n	CA125(Ku/L)		β_2-MG(μg/L)	
		Before treatment	After treatment	Before treatment	After treatment
Observation group	41	17.39±4.76	12.51±3.71	1459.63±115.25	1323.63±123.52
Control group	39	17.42±4.81	14.69±3.25	1460.15±115.36	1402.32±125.96
t value		0.028	2.789	0.020	2.821
P value		0.978	0.007	0.984	0.006

表 3 观察组与对照组面部神经损伤发生情况的比较[例(%)]

Table 3 Comparison of the inciedence of facial nerve injury between the two groups[n(%)]

Groups	n	Injury of marginal mandibular ramus	Marginal mandibular ramus with buccal branch injury	All the damage	Total damage rate
Observation group	41	3(7.32)	2(4.88)	0(0.00)	5(12.20)
Control group	39	6(15.38)	4(10.26)	4(10.26)	14(35.90)
χ^2 value					6.201
P value					0.013

表 4 观察组与对照组治疗前后生活质量评分的比较($\bar{x}\pm s$,分)

Table 4 Comparison of the quality of life scores between the two groups before and after treatment($\bar{x}\pm s$, points)

Groups	n	Before the treatment	After treatment
Observation group	41	29.67± 3.75	45.39± 5.67
Control group	39	29.71± 3.71	38.52± 4.79
t value		0.048	5.839
P value		0.962	0.000

2.5 观察组与对照组并发症发生情况的比较

观察组与对照组并发症总发生率分别为 9.76%、28.21%，比较差异显著(P<0.05)见表 5。

表 5 观察组与对照组并发症发生情况的比较[例(%)]

Table 5 Comparison of the incidence of complications between the two groups[n(%)]

Groups	n	Dry mouth	Facial deformity	Infection of incision	Total incidence rate
Observation group	41	1	2	1	4(9.76)
Control group	39	4	3	3	10(28.21)
χ^2 value					4.466
P value					0.035

3 讨论

腮腺位于外耳道的前下方，主要功能为分泌唾液，帮助消化，与周围组织相比，其组织富含脂肪。腮腺区可发生多种类型的肿瘤，约 80%-86%的颌面部肿瘤患者为腮腺肿瘤[9,10]。腮腺肿瘤病理学特征复杂，多表现为面部耳垂出现包块，肿瘤侵犯面部神经，可致面部感觉障碍，甚至还会发生面瘫[11]。临床通常使用手术治疗该病，但大部分腮腺和腺导管集中在浅叶，所以大部分肿瘤位于浅叶，故对于腮腺手术最关键的是寻找其所在以及解剖面神经[12,13]。目前腮腺肿瘤最有效的治疗方法是手术。传统的腮腺手术是浅腮腺切除术，切除腮腺肿瘤和浅叶，分离保留面神经，该方法视野好、肿瘤切除率高，具有较好的效果，但该手术多采用巨大 S 形切口，会在耳前及颌下留下瘢痕，影响患者面容，且切除范围大，会对整个腮腺进行切除，从而损伤患者腮腺功能及面神经[14-16]。因此，选择更合适的手术方式对治疗腮腺肿瘤具有重要意义。

改良型腮腺切除术是在传统术式上进行修改升级而来，与传统腮腺切除术相比，将 S 型切口改成倒 S 形切口，同时将切口移植耳后，使疤痕隐蔽，且改良后采用由面神经总干向面神经周围支解剖的面神经暴露法，降低面神经周围损伤[17-19]。有研究显示改良式腮腺切除术切口小，美容效果好，具有较高的临床应用价值[20]。本研究结果显示采用改良型腮腺切除术的患者住院时间、手术切口显著低于对照组，且并发症发生率为 9.76%，也低于对照组，提示改良型腮腺切除术有利于患者的康复，具有较高的安全性，可减少手术并发症，分析其原因可能是因为改良型腮腺切除术缩小了切除范围，保留了腮腺管和腮腺前部，也就减少了部分术后并发症的发生率。Akira Yoshizawa[21]等研究对腮腺肿瘤患者分别采用改良型腮腺切除术与传统腮腺切除术进行治疗，发现改良型腮腺切除术对患者生理或心理上的恢复有良好的效果，可改善患者的生活质量。本研究中，改良型腮腺切除术治疗的患者生活质量评分较传统腮腺切除术治疗的患者显著升高。分析其原因可能是因为改良型腮腺切除术切口设计更为科学，可减少手术损伤，手术切口隐蔽，术后瘢痕小，同时改良型手术以带蒂的胸锁乳突肌转位填补腮腺缺失，利于面部美观，从患者身体、心理两方面促进患者生活质量的提高。

CA125 为糖蛋白类抗原，在正常情况下含量较低，当机体患有肿瘤疾病后，其水平升高，故 CA125 水平检测结果可反映肿瘤的发生[22-24]。目前，CA125 水平检测已被广泛运用于多种肿瘤的诊断，有研究显示 CA125 在乳腺癌、胰腺癌等肿瘤的临床疗效方面也具有一定的参考价值[25]。目前，关于鼻咽癌、口咽癌等头颈肿瘤与 CA125 的相关研究也得到广泛关注，Wai Keat Wong[26]等研究显示腮腺肿瘤患者血清 CA125 水平升高，可反映腮腺肿瘤的存在。β_2-MG 是由淋巴细胞、多行核白细胞产生

的一种小分子球蛋白，常见于肺癌、骨髓癌等恶性肿瘤[27-29]。多项研究证实 β_2-MG在肺癌的诊断中表达异常，且对患者 β_2-MG含量的监控可以对化疗导致的早期肾损伤具有一定的诊断价值[30-32]。国外研究显示 β_2-MG水平在良 / 恶性腮腺肿瘤中均可发生不同程度变化，可作为预测腮腺肿瘤发生的标志物[33,34]。本研究结果显示观察组治疗后血清 CA125、β_2-MG水平显著低于对照组，提示改良型腮腺切除术可改善患者肿瘤标志物水平。分析其原因可能是因为腮腺肿瘤中部分肿瘤紧贴腮腺咬肌筋膜，为保证切除肿瘤的彻底性，必须切除该区域的筋膜，而改良型腮腺切除术术中常需切断分布于腮腺区的副交感神经纤维，同时通过拉钩可暴露全部腺体，随之将腺体切除，从而彻底切除肿瘤，最终降低血清 CA125、β_2-MG水平。此外，采用改良型腮腺切除术的患者面部神经总损伤率为 12.20%，明显低于传统腮腺切除术治疗的患者，提示改良型腮腺切除术对患者面部神经损伤较小。Byun J H [35]等研究也显示改良腮腺切除术缩小了手术切除的范围，保留了残余腺体的分泌功能，从而减少了对面神经的损伤，与本研究结果相似。分析其原因可能是因为传统的腮腺切除术是将肿瘤组织及腮腺全部切除，严重损害腮腺主管和面神经。改良腮腺切除术采用面神经显露的方法，保留腮腺主管后，可在腮腺手术区与皮肤之间形成天然屏障，继续发挥腮腺的分泌功能，也能很好地保护面神经，从而降低面神经周围支的损伤概率。

综上所述，采用改良型腮腺切除术治疗腮腺肿瘤患者的临床效果显著，且安全性高，并可有效改善患者生活质量，降低 CA125、β_2-MG水平。

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