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电视胸腔镜与开胸手术治疗重症肌无力的疗效及安全性分析

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摘要 目的:探讨电视胸腔镜与开胸手术治疗重症肌无力的疗效及安全性。**方法:**选取 60 例重症肌无力患者,按随机数字表法分为两组,观察组(32 例)采用电视胸腔镜手术治疗,对照组(28 例)采用开胸手术治疗,观察并记录两组围手术期指标,两组术前、术后 3 个月、6 个月 QMG 评分及随访 6 个月期间并发症的发生情况。**结果:**围手术期间,两组手术时间相比差异无统计学意义($P>0.05$),观察组术中出血量少于对照组,术中引流时间、住院时间及切口长度均短于对照组($P<0.05$)。术前,两组 QMG 评分比较无统计学差异($P>0.05$),术后 3 个月、6 个月,两组 QMG 评分均较治疗前显著降低,且观察组 QMG 评分均低于对照组($P<0.05$)。随访 6 个月期间,观察组并发症 7 例,对照组并发症 17 例,主要并发症为肺部感染,观察组并发症发生率显著低于对照组($P<0.05$)。**结论:**采用电视胸腔镜手术治疗重症肌无力具有手术切口小、患者术后恢复快,手术安全性较高的优点。

关键词:电视胸腔镜;开胸手术;重症肌无力;并发症

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Analysis of the Efficacy and Safety of Video Assisted Thoracic Surgery and Thoracic Surgery in the Treatment of Myasthenia Gravis

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ABSTRACT Objective: To investigate the efficacy and safety of video assisted thoracic surgery and thoracic surgery in the treatment of myasthenia gravis. **Methods:** 60 patients with myasthenia gravis were selected and randomly divided into two groups. The observation group(32 cases) received video assisted thoracic surgery. The control group(28 cases) received thoracic surgery. The efficacy and safety of video assisted thoracic surgery and thoracic surgery in the treatment of myasthenia gravis was evaluated by perioperative indexes, QMG scores before operation, after 3 months, 6 months operation and complications during 6 months follow-up. **Results:** During the perioperative period, there was no statistical significance in the operation time between two groups($P>0.05$). The bleeding volume of observation group was less than that of the control group ($P<0.05$). The drainage time, hospitalization and incision length of observation group were shorter than those of the control group ($P<0.05$). Before operation, there was no statistical significance in the QMG scores. At 3 months, 6 months after operation, the QMG scores were decreased in both groups. The QMG score of observation group was lower than that of the control group ($P<0.05$). During 6 months' follow-up, complications were observed in 7 cases of the observation group and 17 cases of the control group, the major complication was pulmonary infection. The incidence of complications in the control group was higher than that of the observation group ($P<0.05$). **Conclusion:** Video assisted thoracic surgery had advantages of smaller surgical incision, faster recovery and higher safety in the treatment of myasthenia gravis.

Key words: Video assisted thoracic surgery; Thoracic surgery; Myasthenia gravis; Complication

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前言

重症肌无力作为一种自身免疫性疾病,多与胸腺异常有关,如不及时治疗,患者常因全身肌无力,易感疲劳,面部表情异常以及咀嚼无力而不能正常进行工作和生活^[1]。保守治疗效果不佳,不能彻底改善胸腺病灶,患者易出现肌无力复发症状^[2,3],故多采取切除异常胸腺的方式。电视胸腔镜和开胸手术是两种

常用的手术方法,随着微创手术地不断发展,临床治疗上逐渐以电视胸腔镜手术为主。既往研究对电视胸腔镜手术的围手术期情况及并发症进行了报道,但对疗效方面描述较少^[4,5]。重症肌无力可采用定量重症肌无力评分(QMG)进行衡量,以评价手术效果。因此,本研究回顾性分析了 60 例来我院诊治的重症肌无力患者的临床资料,分别采用电视胸腔镜与开胸手术治疗,现报道如下:

1 资料与方法

1.1 病例资料

选取重症肌无力患者 60 例,年限:2008 年 3 月 -2016 年 3

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月,均为我院心血管一病区收治的患者,纳入标准:①符合重症肌无力的诊断标准^[6];②临床表现为部分或全身肌无力症状;③经本院伦理委员会同意,术前患者均签署书面知情同意书。排除标准:原发性高血压、凝血功能障碍、自身免疫性疾病、肺部

感染患者。按随机数字表分为两组,观察组(32例)采用电视胸腔镜手术治疗,对照组(28例)采用传统开胸手术治疗,两组病例资料相比具有可比性($P>0.05$),见表1。

表1 两组病例资料比较

Table 1 Comparison of the clinical data between two groups

Groups	n	Gender (male/female)	Age (year)	MGFA type					
				I	II a	II b	IIIa	IIIb	IVa
Observation group	32	8/24	38.4± 8.4	11	11	6	2	1	1
Control group	28	10/18	37.3± 7.9	12	10	4	1	0	1

1.2 手术方法

观察组:行电视胸腔镜手术,患者取左侧卧位,全麻双腔插管,于右腋中线第7肋间戳孔1.0 cm置入胸腔镜,切口长度约1.5 cm。另于右腋前线第3、5肋间腋前线处分别作一操作孔,长度约1.5-2 cm。先游离胸腔粘连(如有粘连),探查胸腺病变情况及其与周围组织关系。分离从胸腺下极开始,沿右侧膈神经内前方切开前纵膈胸膜,电凝钩离断小血管及纤维索条,充分游离胸骨后的粘连面,从腺体后方沿心包前方以钝锐性结合向上、向内剥离胸腺,暴露出汇入左无名静脉或左右无名静脉交界处的胸腺静脉,结扎或用钛夹钳夹闭合后切断或超声刀离断,再逐步向上游离出胸腺上极,完整切除包括瘤体的胸腺组织,清扫前纵膈、心包周围及右侧膈肌面脂肪组织,可尽量清除左侧脂肪组织。彻底止血,于右腋中线第7肋间放置一根胸腔闭式引流管,逐层缝合手术切口。

对照组:行传统开胸手术。患者取仰卧位,全麻单腔插管,取胸部正中切口,长15~20 cm,劈开胸骨,充分暴露前、上纵膈,探查胸腺情况。按从上到下顺序钝性及锐性游离并完整切除包括瘤体的胸腺组织,清除双侧肺门、心包周围及双侧膈肌面脂肪组织,避免损伤纵膈胸膜和膈神经。止血后逐层关闭手术切口,放置纵膈引流管,如有纵膈胸膜破损或病变累及胸膜,

切除后胸腔开放者需置闭式胸引管。胸腺切除方法及范围同观察组一致。

1.3 观察指标

①围手术期指标:观察并记录两组手术时间,术中出血量,引流时间,住院时间,切口长度;②疗效:采用定量重症肌无力评分(QMG)对患者术前、术后3个月、术后6个月的受累肌群的肌无力严重程度进行打分,正常记为0分,肌无力轻、中、重度分别记为1~13分,共计13个项目,总分值越低说明肌无力症状越轻;③并发症:随访6个月期间,观察并记录两组患者是否有肺部感染、切口感染和肌无力危象发生。

1.4 统计学方法

采用SPSS 17.0统计软件分析,数据以 $\bar{x} \pm s$ 表示,组内术前与术后相比采用配对t检验,组间比较采用两独立样本t检验,计数资料采用卡方检验,以 $P<0.05$ 为差异有统计学意义。

2 结果

2.1 两组围手术期指标的比较

围手术期间,两组手术时间相比差异无统计学意义($P>0.05$),观察组术中出血量少于对照组,术中引流时间、住院时间及切口长度均短于对照组($P<0.05$),见表2。

表2 两组围手术期指标对比

Table 2 Comparison of the perioperative indexes between two groups

Groups	n	Operation time (min)	Bleeding (mL)	Drainage time(d)	Hospitalization (d)	Incision length (cm)
Observation group	32	124.7± 21.7	43.4± 14.1*	2.7± 1.6*	7.5± 1.9*	3.2± 0.4*
Control group	28	107.9± 25.5	108.1± 24.4	5.2± 1.3	12.5± 3.9	12.7± 2.7

Note: compared with the control group, * $P<0.05$.

2.2 两组临床疗效的比较

术前,两组QMG评分无统计学差异($P>0.05$);术后3个

月、6个月,两组QMG评分均较术前显著降低,且观察组QMG评分均低于对照组($P<0.05$),见表3。

表3 两组临床疗效对比

Table 3 Comparison of the efficacy between two groups

Groups	n	Before operation	3 months after operation	6 months after operation
Observation group	32	13.6± 9.3	7.5± 3.1**	4.7± 0.8**
Control group	28	14.1± 8.5	9.3± 2.3*	6.6± 0.7*

Note: compared with the value before operation, * $P<0.05$; compared with the control group, ** $P<0.05$.

2.3 两组并发症发生情况的比较

随访6个月期间,观察组并发症7例,对照组并发症17

例,观察组并发症发生率低于对照组($P<0.05$)。其中,主要并发症为肺部感染,对照组肺部感染风险高于观察组($P<0.05$),见表4。

表 4 两组并发症发生情况的比较

Table 4 Comparison of the incidence of Complications between two groups

Groups	n	Pulmonary infection	Incision infection	Myasthenia crisis	Total complication rate
Observation group	32	6(18.8)*	1(3.1)	0	7(21.9)*
Control group	28	12(42.9)	4(14.3)	1(3.6)	17(60.7)

Note: compared with the control group, *P<0.05.

3 讨论

重症肌无力是由乙酰胆碱受体抗体介导、细胞免疫依赖的获得性自身免疫系统疾病,80%由胸腺异常引起,其中有15%合并胸腺瘤,65%合并胸腺淋巴瘤组织样增生^[7,8],临床表现为部分或全身肌无力,耐力力下降,易感疲劳^[9,10]。依据美国重症肌无力协会(Myasthenia Gravis Foundation of America, MGFA)可将患者分为5个类型,I、II、III、IV和V型,其中V型病情程度最重,患者需要气管插管或呼吸机支持^[11,12]。

手术切除是目前重症肌无力主要的治疗方法,疗效远高于保守治疗。电视胸腔镜与开胸手术是常用的两种手术方法^[13]。传统开胸手术包括胸骨正中切口、全胸骨劈开,手术视野暴露良好,前纵隔脂肪清扫彻底,可直视下进行,手术操作便利,手术切除范围广,上到甲状腺下端,两侧达膈神经内侧,下达膈肌^[14,15]。但手术创伤大,易感染,术后遗留瘢痕明显,术前使用激素有切口愈合不良的风险。此外,该术式对胸骨完整性损伤较大,术后有可能引起胸部畸形,影响患者生活质量和情绪^[16]。随着显微外科技术不断提高,电视胸腔镜下胸腺扩大切除术开始逐渐应用于临床。电视胸腔镜也具有宽阔的手术视野,能清晰地暴露膈神经、上腔神经、双侧无名静脉,对肺功能干扰小^[17]。然而对于肥胖症患者,不能彻底清扫前纵隔脂肪,对术中突发情况如大出血,碍于手术切口较小,也不能及时采取应对措施^[18]。

陈国平等^[19]采用电视胸腔镜与传统开胸手术治疗重症肌无力,发现采用电视胸腔镜手术治疗的患者术中出血量、切口总长度、胸引管带管时间、住院时间均短于用开胸手术的患者。本研究中,两组手术时间相比,无统计学差异,观察组术中出血量少于对照组,术中引流时间、住院时间及切口长度均短于对照组,与陈国平等研究相仿,说明电视胸腔镜手术对重症肌无力患者创伤小,患者术后康复速度较快。马铮等^[20]采用电视胸腔镜手术治疗重症肌无力,术前患者 QMG 评分(10.7±7.1)分,术后即刻(7.76±4.31)分,术后6个月(5.47±4.62)分。本研究中,采用电视胸腔镜手术治疗的,术前 QMG 评分(13.6±9.3)分,术后3个月,6个月的 QMG 评分为(7.5±3.1)和(4.7±0.8)分,与马铮等研究相仿。术后 QMG 低于马铮等研究结果,可能与我院开展电视胸腔镜手术时间较长,术者对于手术操作较为熟练,治疗效果较好有关。术后3个月,6个月,观察组 QMG 评分均低于对照组,提示电视胸腔镜手术对重症肌无力具有较好地治疗效果。胸腔手术对肺部器官干扰较大,开胸手术使得肺部暴露范围较广,容易引起感染,故肺部感染成为术后主要并发症。为了避免肺部感染出现,采取措施为术前对缝合所用手术器械进行严格消毒,术中严格无菌手术操作过程,术后24h后即刻给予广谱抗生素预防感染,降低感染风险。因此,随访6个月期间,观察组并发症率明显低于对照组。

综上所述,采用电视胸腔镜手术治疗重症肌无力具有手术切口小、患者术后恢复快,手术安全性较高的优点。

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