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腹腔镜子宫肌瘤剔除术的临床应用分析*

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摘要 目的:探讨腹腔镜子宫肌瘤剔除术的临床效果及安全性。**方法:**回顾性分析在我院行腹腔镜子宫肌瘤剔除术的患者 68 例(实验组)及同期行腹式子宫肌瘤剔除术的患者 58 例(对照组)的临床资料,比较其临床表现、术中出血量、手术时间、术后最高体温、术后应用抗生素时间、住院时间。**结果:**实验组术中出血量、术后应用抗生素时间、住院平均时间均显著优于对照组($P<0.05$);手术时间较对照组长($P<0.05$);两组术后放置引流、术后最高体温比较无差异($P>0.05$)。多发、直径 ≥ 5 cm 的肌瘤腹腔镜子宫肌瘤剔除术中出血、手术时间较单发、直径 <5 cm 的肌瘤($P<0.05$)显著增加($P<0.05$),肌瘤部位对术中出血及手术时间无影响($P>0.05$)。**结论:**腹腔镜子宫肌瘤剔除术中出血量少,术后恢复快,术中出血及手术时间与肌瘤类型及大小有关,与肌瘤部位无关,是一种治疗子宫肌瘤安全、有效的术式。

关键词:子宫肌瘤;腹腔镜子宫肌瘤剔除术;腹式子宫肌瘤剔除术;临床效果

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Analysis of the Clinical Application of Laparoscopic Myomectomy*

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ABSTRACT Objective: To evaluate the clinic effect and safety of laparoscopic myomectomy. **Methods:** The clinical data of 68 women who underwent hysteromyomectomy under laparoscope (experimental group) and 58 women who underwent open myomectomy (control group) in our hospital were retrospectively analyzed. The clinical manifestation, blood loss, surgical time, fever time of treatment with antibiotics and average hospital stay were compared between the two groups. **Results:** The intraoperative blood loss, time of treatment with antibiotics and average hospital stay significantly better in the experimental group than those in the control group ($P<0.05$). The surgical time was longer in the experimental group than that in the control group ($P<0.05$). There was no difference in the postoperative drainage and fever between the two groups ($P>0.05$). The blood loss and surgical time increased obviously in the patients with multiple myoma and size of myoma ≥ 5 cm than those patients with single myoma and size of myoma ≤ 5 cm ($P<0.05$). No correlation was found in the blood loss and surgical time among different locations of myoma ($P>0.05$). **Conclusion:** Laparoscopic myomectomy which had the advantages of less intraoperative blood loss and faster postoperative recovery was an effective and safe treatment of hysteromyoma, the intraoperative blood loss and surgical time were correlated with the type and size of hysteromyoma, but had nothing to do with the position of myoma.

Key words: Uterine leiomyoma; Laparoscopic myomectomy; Open myomectomy; Clinic effect

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前言

子宫肌瘤是女性生殖系统最常见的良性肿瘤,其病因与多种因素有关,如雌孕激素刺激^[1]、子宫平滑肌损伤、生长因子及遗传易感性等^[2],患病群体呈年轻化趋势^[3]。其治疗包括药物和手术治疗,无症状的肌瘤一般不需治疗,对于有症状的肌瘤,若药物治疗无效需考虑手术治疗,具体术式选择需结合患者的意愿及生育要求,子宫切除是治疗症状性子宫肌瘤最常采用的方法。但近年来,随着妇女保健意识不断增强,保留子宫的愿望增加,腹腔镜子宫肌瘤剔除术因其具有创伤小、出血量少^[4]、术后

并发症少^[2]、术后疼痛轻和恢复快等优点^[5]得到广泛应用。但人们对于腹腔镜子宫肌瘤剔除术一直存在争议,如手术操作复杂、时间长、术中出血量大、影响产科质量、子宫破裂等^[6]。本文通过回顾性分析本院收治的 126 例子宫肌瘤患者的病历资料,旨在探讨腹腔镜子宫肌瘤剔除术的可行性和临床效果,现将结果报道如下。

1 资料与方法

1.1 一般资料

对我院 2009 年 8 月 -2011 年 1 月收治的 126 例子宫肌瘤

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患者(经病理证实)的病历资料进行回顾性研究,基本临床资料见表1。按照术式将所有患者分为腹腔镜子宫肌瘤剔除术组(实验组)和腹式子宫肌瘤剔除术(对照组),两组患者的一般临床资料比较均无统计学意义($P>0.05$),具有可比性。

表1 两组患者的一般临床资料比较
Table 1 Comparison of the general clinical characteristics between two groups

	Control group(n=58)	Experimental group(n=68)	P value
Age	35.67± 7.84	37.43± 5.74	0.255
Type of myoma			0.61
Single	23(24.4)	30(28.6)	
Multiple	35(33.6)	38(39.4)	
Size of myoma			0.94
≤ 5 cm	15(15.2)	18(17.8)	
≥ 5cm	43(42.8)	50(50.2)	
Pregnancy			0.004
0	20(13.3)	9(15.7)	
≥ 1	38(44.7)	59(52.3)	
Menorrhagia	15(17.5)	23(20.5)	0.33
Lower abdominal pain	8(7.8)	9(9.2)	0.92
Distention	4(3.7)	4(4.3)	0.81

1.2 手术指征

近宫颈或宫颈管肌瘤,因肌瘤流产一次或一次以上或不孕1年;排便排尿困难;痛经;多发肌瘤;直径大于2cm的后壁肌瘤;性交痛;肌瘤不断增大(6月内增大超过2cm);子宫异常增大无法排除肉瘤样变;绝经后肌瘤不断增大;月经过多继发贫血,保守治疗无效。

1.3 诊断标准

病理检查证实为子宫肌瘤,同时排除宫颈及子宫内膜病变。

1.4 手术方法

1.4.1 腹腔镜子宫肌瘤剔除术 经气管插管经脉及吸入麻醉成功后,取膀胱截石位,常规消毒外阴及阴道,安而碘消毒腹部,术野铺无菌巾单。建立人工气腹(压力为14 mmHg),在腹部做3点穿刺,第一穿刺孔为脐部置镜,其余穿刺点置器械。双极电凝子宫肌瘤结节处浆膜层,单极电钩剖开肌瘤壁,暴露肌瘤,旋切器取出肌瘤,1-0可吸收线连续缝合肌瘤腔,肌瘤钻取出肌瘤。生理盐水冲洗腹腔,探查有无活动性出血,局部创面外敷止血材料,排除腹腔气体,缝合脐部切口,护创贴外敷各切口。

1.4.2 腹式子宫肌瘤剔除术 手术具体操作方法见《妇产科手术学》。

1.5 观察指标

包括年龄、临床表现、术中出血量、手术时间、术后最高体温、术后应用抗生素时间、住院时间。

1.6 统计学分析

各观察数据采用SPSS13.0软件统计包进行统计学处理,连续性数据资料以均数±标准差($\bar{x} \pm s$)表示,组间比较采用t检验,分类资料采用百分率表示,组间比较采用 χ^2 检验。非正态分布的连续性数据用四分位间距表示,以 $P<0.05$ 为差异有统计学意义。

2 结果

2.1 两组患者术中及术后情况的比较

与对照组比较,腹腔镜子宫肌瘤剔除术组术中出血量显著减少($P<0.05$),术后应用抗生素时间和平均住院时间明显缩短($P<0.05$);手术时间显著延长($P<0.05$),但两组术后是否需放置引流及术后最高体温比较均无统计学差异($P>0.05$),见表2。

表2 两组患者术中及术后情况的比较
Table 2 Comparison of the intraoperative and postoperative data between two groups

Outcomes	Control group(n=58)	Experimental group(n=68)	P value
Surgical time, min	87.5(66-99.75)	110(92.75-126.25)	0.001
Blood loss, ml	180(100-400)	150(50-300)	0.039
Postoperative drainage	3(3.6)	5(4.4)	0.65
Fever, °C	37.27(37.65-36.9)	36.95(37.18-36.6)	0.15
Antibiotics, days	4.5(5-3)	3.25(4-3)	0.04
Average hospital stay, days	5.48(6-4)	4.54(5.75-3.25)	0.0001

2.2 肌瘤类型、大小及部位对腹腔镜子宫肌瘤剔除术术中出血及手术时间的影响

多发、直径 ≥ 5 cm 的子宫肌瘤腹腔镜子宫肌瘤剔除术中出血、手术时间较单发、直径 <5 cm 的子宫肌瘤显著增加($P<0.05$),而肌瘤部位对腹腔镜子宫肌瘤剔除术中出血及手术时间均无明显影响($P>0.05$),见表3、表4。

表3 肌瘤类型、大小及部位对腹腔镜子宫肌瘤剔除术中出血量的影响

Table 3 Effect of type, size and location of myoma on the intraoperative blood loss of laparoscopic myomectomy

	Intraoperative blood loss(mL)		P value
	Control group(n=58)	Experimental group(n=68)	
Type of myoma			0.000
multiple	377.88(500-100)	281.67(300-100)	
single	265.04(275-50)	182.65(237.5-50)	
Size of myoma			0.000
≥ 5 cm	406.85(600-100)	280.65(325-100)	
< 5 cm	130(100-50)	113.89(137.5-50)	
Location of myoma			0.663
Submucosal	225(130-255)	145(97.5-196)	
Subserosal	110(80-178)	130(63.5-147)	
Intramural	87.5(71.5-260)	92(100-172.5)	

表4 肌瘤类型、大小及部位对手术时间的影响

Table 4 Effect of type, size and location of myoma on the surgical time of laparoscopic myomectomy

	Surgical time(min)		P value
	Control group(n=58)	Experimental group(n=68)	
Type of myoma			0.011
multiple	88(78-99.5)	104(93.75-130.5)	
single	72.5(60-92.5)	80(95-120)	
Size of myoma			0.032
≥ 5 cm	84(65.75-100)	101.5(87.5-126.25)	
< 5 cm	82(76.5-90)	96.5(79.25-106.25)	
Location of myoma			0.270
Submucosal	97.5 (76.3-110)	125 (90-155)	
Subserosal	80.5 (60-105)	97 (76-163)	
Intramural	100.5 (90-120)	110.5 (74.1-149.3)	

3 讨论

多项研究数据表明与对照组相比,实验组具有术中出血少、术后恢复快、住院时间短、患者满意度高等优点,但腹腔镜子宫肌瘤剔除术手术时间各研究结果存在差异,除与样本量及具体手术操作不同外,可能还与肌瘤大小、数目^[6]、患者年龄等有关,而实验中未排除这些混杂因素的影响,控制肌瘤大小对手术时间的影响后,两术式所需时间无明显差异^[7]。肌瘤较大、数量较多可使内膜面积增大,子宫收缩异常^[8],手术时间延长;随着年龄的增长,激素水平降低,肌瘤体积将有所缩小^[1],相应缩短手术时间;对于较大肌瘤术前应用促性腺激素释放激素类似物(GnRH-a)3-6个月,可有效减少术中出血、缩短手术时间,增加内镜手术可行性。

3.1 腹腔镜子宫肌瘤剔除术的可行性及临床效果

近年来,随着晚婚晚育率的增加、身体完整性观念的提高以及妇女保健意识的增强,肌瘤剔除术得到广泛应用,可在保留患者生育功能的同时,维持子宫生理功能、保持盆底结构完

整性及性腺轴功能统一。本研究中,腹腔镜子宫肌瘤剔除术中出血量明显少于传统腹式子宫肌瘤剔除术,这可能与以下因素有关,一是气腹压力可阻止毛细血管内血液外渗;二是腹腔镜下可及时、有效、准确止血^[9]。但对于较大、多发及肌壁间肌瘤,出血凶猛,电凝止血困难,镜下缝合耗时较长,可镜下将止血带反折压紧子宫峡部,钛夹固定,阻断大部分上行血液后行肌瘤切除^[10],术中结合电凝后紧贴瘤体切断肌瘤基底部、垂体后叶素注射局部注射、分层连续缝合切口、剔除肌瘤前结扎子宫动脉等方法均可有效减少术中出血量^[11]。也有研究认为腹腔镜子宫肌瘤剔除术中出血量大^[12],除与样本量及具体手术操作差异有关外,肌瘤较大,数量较多、嵌入肌壁较深或合并子宫腺肌症时,腹腔镜下暴露、剥离、缝合止血等操作难度大大增加,使术中出血增加及手术时间明显延长^[13]。积累丰富临床经验及提高操作水平是减少术中出血量及缩短手术时间的有效方法。不同类型肌瘤对手术时间、术中出血无明显影响,可能与术中使用垂体后叶素或缩宫素时血管收缩作用明显有关。

腹腔镜子宫肌瘤剔除术引起的炎症反应轻,可能是患者术后恢复情况良好的主要原因^[14],如术后应用抗生素时间和平均住院时间短、疼痛轻、粘连轻、伤口美观等^[15]。本实验中腹腔镜子宫肌瘤剔除术后抗生素应用时间、平均住院时间均明显短于传统腹式子宫肌瘤剔除术,除与患者本身的身体机能相关外,还说明腹腔镜子宫肌瘤剔除术对脏器的损伤程度轻,充分体现了微创手术的优越性。

子宫肌瘤被认为是引发不孕的重要因素之一,尤其是仅有子宫肌瘤而无其他不孕因素的患者,约70%不孕患者在行肌瘤切除术后可妊娠。Seracchioli等^[16]研究发现两术式对妊娠、流产、产式等的影响无明显差异,浆膜下肌瘤、肌壁间肌瘤因其具有假包膜保持了肌层的完整性,可以提高妊娠率及分娩率。腹腔镜子宫肌瘤剔除术后粘连轻,对渴望怀孕的患者尤其有利,因而术后患者妊娠是安全的^[17]。

3.2 腹腔镜子宫肌瘤剔除术面临的问题

本研究的结果与相关实验结果达成一致^[18-20],再次表明腹腔镜子宫肌瘤剔除术术式的优越性,但该术式本身也会产生一系列问题。

3.2.1 腹腔镜手术本身的弊端 腹腔镜由于手术空间小、视野暴露不完全等不足,对于大肌瘤、多发肌瘤的切除较困难,不可避免会伴发皮下气肿、血管损伤、电器械损伤、泌尿系损伤大出血、肠道损伤、神经损伤等术中及术后并发症,均与手术操作、手术时间、手术创面等因素有关。近年来,超声刀的应用在一定程度上减少了电凝不当引起的膀胱、输尿管及肠道损伤的发生^[21]。腹腔镜子宫肌瘤剔除术要求临床医生掌握扎实的盆腔解剖结构,积累丰富的手术经验,与助手、护士密切配合,评估好手术适应症、禁忌症与患者自身情况的关系,必要时不同术式配合使用才能达到治疗效果。

3.2.2 术后复发 相关文献报道腹腔镜子宫肌瘤剔除术术后的复发率明显高于腹式子宫肌瘤剔除术,且间隔时间短,平均于术后两年复发,但两术式复发后行子宫切除术的几率无明显差异^[22]。复发率高的根源在于腹腔镜触觉感较差,无法触摸深部肌壁间肌瘤及肌壁间浆膜下尚未发生的小肌瘤。两术式均无法避免肌层内残留小肌瘤会未发现的肌瘤,从而使妊娠或妊娠到足月的机会降低。术前进行超声及宫腔镜检查可明确肌瘤部位及数量,可有效降低肌瘤的复发率。

3.2.3 子宫切口瘢痕破裂 子宫切口瘢痕破裂为产科危重症,严重威胁母婴健康,但仍属个案报道,无法得出明确结论。据文献报道,腹腔镜子宫肌瘤剔除术后29-35.5周子宫破裂的发生率约为2.4‰,有效预防其发生的关键在于保持子宫结构及功能的完整性^[23]。这就要求术者需具备一定的经验和操作技术,且术中必须仔细缝合子宫切口,准备妊娠时仔细评价子宫切口瘢痕的厚度和质量,严密观察妊娠过程中子宫变化。

总之,随着妇科腹腔镜手术的不断发展和操作技术的不断提高,做到术前完善相关检查、术中操作到位、术后预防出血及感染,腹腔镜子宫肌瘤剔除术是一种安全、有效、值得推广的微创术式,及时全面的术后随访有助于评价腹腔镜子宫肌瘤剔除术的远期疗效。

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