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吻合器痔上黏膜环切术联合外剥内扎手术治疗Ⅲ-Ⅳ度环状混合痔的疗效及对患者肛门功能的影响*

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摘要 目的:研究吻合器痔上黏膜环切术(PPH)联合外剥内扎手术(MMH)治疗Ⅲ-Ⅳ度环状混合痔的疗效及对患者肛门功能的影响。**方法:**选择2016年3月~2018年3月我院收治的Ⅲ-Ⅳ度环状混合痔患者128例为研究对象,将入选患者按照随机数字表法分为MMH组(n=58,采用MMH治疗)和联合组(n=70,采用PPH联合MMH治疗),比较两组手术指标及术后恢复情况,术后对两组患者进行为期3个月的随访,随访结束后,比较两组治疗疗效、肛门功能以及并发症的发生情况。**结果:**与MMH组比较,联合组手术出血量明显更少,住院时间、伤口愈合时间明显更短,各时间点的疼痛评分明显降低($P<0.05$)。与MMH组比较,联合组治疗总有效率升高,差异有统计学意义($P<0.05$)。与MMH组比较,联合组患者肛管静息压、肛管高压带长度、直肠肛门抑制反射阳性率均升高,肛管最大收缩压降低($P<0.05$),但两组直肠静息压比较差异无统计学意义($P>0.05$)。联合组并发症发生率为10.00%(7/70),低于MMH组的34.48%(20/58),差异有统计学意义($P<0.05$)。**结论:**较传统的MMH单独治疗,PPH联合MMH治疗Ⅲ-Ⅳ度环状混合痔具有更好的效果,可以缩短术后恢复时间,改善术后疼痛程度及肛门功能,且安全性较高。

关键词:环状混合痔;吻合器痔上黏膜环切术;外剥内扎手术;疗效;肛门功能

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Curative Effect of Procedure for Prolapse and Hemorrhoids Combined with Milligan-morgan Haemorrhoidectomy in Treatment of III-IV Degree Mixed Hemorrhoids and Its Effect on Anal Function of Patients*

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ABSTRACT Objective: To study curative effect of procedure for prolapse and hemorrhoids (PPH) combined with milligan-morgan haemorrhoidectomy (MMH) in treatment of III-IV degree mixed hemorrhoids and its effect on anal function of patients. **Methods:** 128 patients with III-IV degree mixed hemorrhoids who were treated in our hospital from March 2016 to March 2018 were selected as research object, the enrolled patients were divided into MMH group (n=58, treated with MMH) and combined group (n=70, treated with PPH combined with MMH) according to random number table method. Operation indexes and postoperative recovery of two groups were compared. The patients in the two groups were followed up for 6 months after operation. After the end of the follow-up, the curative effect, anal function and complications of the two groups were compared. **Results:** Compared with the MMH group, surgical bleeding volume in the combined group was significantly less, hospital stay, wound healing time were shorter, and the pain scores at each time point were significantly lower ($P<0.05$). Compared with group MMH, the total effective rate of combined group was significantly increased, and the difference was statistically significant ($P<0.05$). Compared with MMH group, the anal canal resting pressure, the length of anorectal hyperbaric zone and anorectal reflex positive rate in the combined group were significantly increased, anal maximum systolic pressure was decreased ($P<0.05$), however, there was no significant difference in rectal resting pressure between the two groups ($P>0.05$). The incidence of complications in the combined group was 10.00% (7/70), which was significantly lower than 34.48%(20/58) in the MMH group, and the difference was statistically significant ($P<0.05$). **Conclusion:** Compared with the traditional MMH treatment alone, PPH combined with MMH has better effect in the treatment of III-IV degree mixed hemorrhoids. It can shorten postoperative recovery time, improve postoperative pain level and anal function, and it has higher safety.

Key words: Circumferential mixed hemorrhoids; Procedure for prolapse and hemorrhoids; Milligan-morgan haemorrhoidectomy;

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前言

痔是肛肠科常见疾病,又被称为痔疮,其在任何年龄群体均可发生,而且随着年龄的增加,其发病率也不断升高,对人们的健康造成严重影响^[1,2]。环状混合痔是指同时被肛管皮肤和直肠粘膜所覆盖,围绕直肠肛管生长一圈所形成的痔,而Ⅲ-Ⅳ度环状混合痔是其发展的严重阶段,临床症状主要表现为痔脱出、便血、水肿以及血栓的形成等,严重影响患者生活质量^[3,4]。环状混合痔临床主要治疗方式为手术治疗,但手术方式多样,且各有利弊。外剥内扎手术(Milligan-morgan haemorrhoidectomy, MMH)是环状混合痔传统的治疗术式,该术式操作简单,是治疗单发痔环状混合痔比较有效的方法,然而其存在术后并发症较多、痔核切除量小、创面难愈合、易复发等缺点^[5,6],因而寻求更有效的环状混合痔术式显得尤为迫切。吻合器痔上黏膜环切术(Procedure for prolapse and hemorrhoids, PPH)是通过环形吻合器切除与痔核粘连的黏膜以治疗混合痔的术式,其具有并发症少、创面愈合快、切口小、可减轻术后疼痛等特点^[7,8]。但既往报道显示^[9],PPH对患者外痔并不能完全切除。鉴于此,本研究采用PPH联合MMH的术式治疗Ⅲ-Ⅳ度环状混合痔,并对其效果进行分析,以期为Ⅲ-Ⅳ度环状混合痔术式的选择提供参考,阐述如下。

1 资料与方法

1.1 临床资料

选择2016年3月~2018年3月128例我院收治的Ⅲ-Ⅳ度环状混合痔患者为研究对象,纳入标准:(1)患者均符合《痔临床诊治指南(2006版)》^[10]中关于Ⅲ-Ⅳ度环状混合痔的诊断标准;(2)使用过药物治疗;(3)患者肛门功能正常,且无松弛现象发生;(4)患者对本研究知情同意,并签署同意书。排除标准:(1)伴有恶性肿瘤者;(2)伴有心、肝、肾等重要脏器功能不全者;(3)妊娠或者哺乳期女性;(4)合并有精神疾病无法正常交流沟通者;(5)凝血功能障碍者。本研究经医院伦理委员会批准通过。将入选患者按照随机数字表法分为MMH组($n=58$)和联合组($n=70$)。MMH组男性32例,女性26例;年龄30-76岁,平均 (48.23 ± 8.14) 岁;病程7-35年,平均 (21.98 ± 5.56) 年;痔核分度:Ⅲ度38例,Ⅳ度20例。联合组男性43例,女性27例;年龄31-78岁,平均 (47.99 ± 8.83) 岁;病程7-37年,平均 (22.05 ± 4.97) 年;痔核分度:Ⅲ度44例,Ⅳ度26例。两组临床资料比较无统计学差异($P>0.05$),均衡可比。

1.2 方法

所有患者均在术前进行抗感染治疗(女性患者还需进行阴道检查),并清洁灌肠,同时行骶管麻醉或腰麻,在此基础上,MMH组患者采用传统的MMH术式进行治疗。患者取膀胱截石位,对肛门常规消毒,充分扩张肛门以暴露痔核,在环状混合痔的外痔底部切一个“V”型切口,将外痔采用梭形的方式进行剥离,剥离至齿线0.5 cm处内痔暴露时,用血管钳夹住内痔底

部,并用可吸收线进行“8”字缝针,随后充分止血。联合组在抗感染治疗、清洁灌肠、麻醉后,采用PPH联合MMH进行治疗。内痔切除:患者取膀胱截石位,对肛门及会阴部进行常规消毒,充分扩肛至宽度可容纳三个手指时,用组织钳牵拉肛管缓慢外移,插入肛管扩张器并用丝线固定,至齿状线暴露时取出内筒,分别在齿状线3 cm处和5 cm处进行荷包逆行缝合,以缝合至黏膜下层为缝合深度的标准。最大限度的扩张吻合器头部,将其钉座放在荷包线的远端,收紧荷包线并打结,从吻合器侧面带出缝线并缓慢向外牵拉,等吻合器完全收紧时,触发保险装置以关闭吻合器,持续20-30s后,取出吻合器,并加强止血。外痔切除:PPH完成后,将外痔组织上提,底部行“V”型切口并进行梭形剥离,然后再进行止血。两组患者在手术完成6h后可给予半流质进食,术后当天禁止排便,术后3-7d内给予抗生素治疗。

1.3 观察指标

1.3.1 手术及术后恢复指标 包括手术出血量、住院时间、术后疼痛评分、伤口愈合时间。分别在术后1d、首次排便以及术后7d采用视觉模拟评分(Visual analogue scale, VAS)评估术后疼痛程度,该评分量表分值范围在0-10分之间,分值越高代表疼痛越剧烈。

1.3.2 疗效评价 术后对患者进行为期3个月的随访,随访结束后,评价两组疗效,分为三个等级,治愈:术后3个月,患者痔块完全回缩,临床症状完全消失,直肠结构及功能恢复正常;有效:术后3个月,患者痔块明显变小,临床症状明显减轻,直肠结构及功能有明显好转;无效:术后3个月,患者痔块无明显变化,且临床症状和直肠功能无改善。总有效率 = 治愈率 + 有效率^[11]。

1.3.3 肛门功能 术后3个月,采用肛肠压力检测仪(型号:XDJ-S8型,合肥凯利光电科技有限公司)检测两组患者肛门功能相关指标(包括肛管静息压、肛管高压带长度、肛管最大收缩压、直肠静息压及直肠肛门抑制反射阳性率),并记录结果。

1.3.4 并发症 观察并记录两组并发症的发生情况。

1.4 统计学方法

采用SPSS23.0统计学软件对研究数据进行处理。手术及术后恢复指标、肛管静息压等计量资料以 $(\bar{x} \pm s)$ 表示,行t检验;疗效、直肠肛门抑制反射阳性率等计数资料以 $[n(\%)]$ 表示,行 χ^2 检验。将 $\alpha=0.05$ 作为检验标准。

2 结果

2.1 两组手术及术后恢复指标比较

与MMH组比较,联合组手术出血量明显更少,住院时间、伤口愈合时间明显更短,各时间点的疼痛评分明显降低($P<0.05$)。详见表1。

2.2 两组治疗疗效比较

与MMH组比较,联合组治疗总有效率升高,差异有统计学意义($P<0.05$)。详见表2。

表 1 两组手术及术后恢复指标比较($\bar{x} \pm s$)Table 1 Comparison of surgical and postoperative recovery indexes of two groups($\bar{x} \pm s$)

Groups	n	Surgical bleeding volume(mL)	Hospital stay(d)	Postoperative pain score(score)			Wound healing time(d)
				Postoperative 1d	First defecation	Postoperative 7d	
Combined group	70	21.58± 3.65	4.89± 1.09	2.03± 0.49	1.86± 0.26	1.53± 0.19	6.89± 1.82
MMH group	58	32.99± 4.27	8.62± 2.58	8.02± 1.12	7.56± 1.08	6.57± 0.86	17.46± 2.79
t	-	17.587	10.978	40.352	42.720	47.684	25.772
P	-	0.000	0.000	0.000	0.000	0.000	0.000

表 2 两组治疗疗效比较[n(%)]

Table 2 Comparison of the therapeutic effect of two groups[n(%)]

Groups	n	Cure	Effective	Invalid	Total effective rate
Combined group	70	49(70.00)	20(28.57)	1(1.43)	69(98.57)
MMH group	58	25(43.10)	27(46.55)	6(10.35)	52(89.65)
χ^2	-				4.878
P	-				0.027

2.3 两组肛门功能比较

与 MMH 组比较,联合组患者肛管静息压、肛管高压带长

度、直肠肛门抑制反射阳性率均升高,肛管最大收缩压降低($P < 0.05$),但两组直肠静息压比较差异不显著($P > 0.05$)。详见表 3。

表 3 两组肛门功能比较

Table 3 Comparison of anal function of two groups

Groups	n	Anal canal resting pressure(mmHg)	Length of anorectal hyperbaric zone(cm)	Anal maximum systolic pressure(mmHg)	Rectal resting pressure(mmHg)	Anorectal reflex positive rate[n(%)]
Combined group	70	60.11± 6.35	4.03± 0.58	143.14± 24.38	6.01± 1.28	62(88.57)
MMH group	58	47.59± 5.14	2.51± 0.92	152.75± 21.53	6.08± 1.12	40(68.97)
t/ χ^2	-	12.087	11.368	2.340	0.326	7.532
P	-	0.000	0.000	0.021	0.745	0.006

2.4 两组并发症比较

联合组并发症发生率为 10.00%(7/70), 低于 MMH 组的

34.48%(20/58),差异有统计学意义($P < 0.05$)。详见表 4。

表 4 两组并发症发生情况比较[n(%)]

Table 4 Comparison of the incidence of complications in the two groups[n(%)]

Groups	n	Perianal edema	Postoperative skin tag	Anal dilatation	Bloody stool	Anus stenosis	Total incidence
Combined group	70	2(2.86)	0(0.00)	1(1.43)	2(2.86)	2(2.86)	7(10.00)
MMH group	58	6(10.34)	3(5.17)	2(3.45)	4(6.90)	5(8.62)	20(34.48)
χ^2	-						11.423
P	-						0.001

3 讨论

痔的发生多因患者肛垫下移和静脉曲张造成,随着人们生活方式和饮食习惯的改变,诱发痔的危险因素也不断增加,久坐久立、长期饮酒、便秘等均可引发痔的产生^[12,13]。痔按照发生部位的不同分为内痔、外痔和混合痔,混合痔有内外痔的共同特点,而环形混合痔是内外痔相互融合并脱出肛门形成的梅花形状痔,其治疗难度较大,一般需进行手术治疗^[14,15]。MMH 作为传统的环形混合痔治疗术式,是基于痔是由静脉曲张造成的

静脉团的理论指导下进行的手术,其操作简单易行,但术后将出现一系列并发症,容易复发,同时对肛垫的破坏较严重^[16-18]。随着肛垫下移学说的产生,痔的治疗演变成肛垫恢复手术,由此,PPH 应运而生。PPH 术式一方面通过切除直肠黏膜及其下层组织,上提肛垫使其回位保持正常的生理位置,以阻止其下移,另一方面由于手术中黏膜组织的切断,阻断了痔区的血供,造成痔核缺血并最终萎缩^[19,21]。但有报道显示^[22],患者行 PPH 术式后,部分外痔仍然不能完全切除,同时部分肛垫回缩效果不佳,因此,需配合 MMH 术式将外痔彻底切除。

本研究中,联合组采用 PPH 联合 MMH 的术式治疗 III-IV 度环形混合痔,结果显示,与 MMH 组比较,联合组手术出血量明显更少,住院时间、伤口愈合时间明显更短,各时间点的疼痛评分明显降低,同时,联合组治疗总有效率明显升高,说明联合两种手术方式可有效提高治疗有效率,减少手术出血量,减轻术后疼痛,具有更好的术后恢复效果。可能是因为 PPH 与 MMH 的联合使用,虽然增加了切口的数量,但是切口均较小,整体创口不大,可有效减少出血量^[23];而 PPH 切除内痔主要在受植物神经支配的齿状线以上操作,此处的神经对手术造成的疼痛并不敏感,同时 PPH 术式可使部分外痔回缩至肛门,减少了切口大小,有利于加速创口愈合和减轻疼痛,缩短了住院时间,因此,联合两种术式可以增加治疗效果,减少了疼痛,加快术后恢复^[24-26]。本研究还显示,与 MMH 组比较,联合组患者肛管静息压、肛管高压带长度、直肠肛门抑制反射阳性率均升高,肛管最大收缩压降低,提示两种术式的联合使用更有利于肛门功能的恢复。传统的 MMH 术式未彻底解决患者肛门下移的病理改变问题,因此其复发现象时有发生^[27,28];而 PPH 术式对肛垫下移病理改变进行针对性的处理,最大程度上保留了肛垫的完整性,同时对肛门内部神经末梢以及直肠组织的损伤程度较低,因此可以保证肛门和直肠功能的正常运行^[29,30]。另外,联合组不良反应发生率低于 MMH 组,说明两种术式的联合使用可以降低患者并发症的发生,分析原因可能与联合组中两种术式可以取长补短,共同发挥治疗效果有关。值得注意的是本研究并未对复发情况进行分析,在以后的研究中可以加大样本量进行复发情况的考察,同时,PPH 术式需要用到吻合器,费用相应会增高,相比传统的 MMH,这也是联合使用的明显不足。

综上所述,采用 PPH 联合 MMH 治疗 III-IV 度环状混合痔临床疗效较好,两种术式可以取长补短,能够加速术后恢复,有效减轻患者疼痛,同时可改善患者肛门功能,减小并发症发生的风险。

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