

多普勒超声引导下痔动脉结扎术术前肠道准备时机探讨

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摘要 目的 探讨多普勒超声引导下痔动脉结扎术(DG-HAL)患者口服复方聚乙二醇电解质行肠道准备的时机。方法 采取前瞻性随机对照的方法,从2010年7月到2011年6月,共有120例接受DG-HAL术的痔患者被随机分成对照组和护理干预组,各60例。对照组术前1天16:00口服复方聚乙二醇电解质,实验组手术当天4:30口服复方聚乙二醇电解质,比较两种方法服药后初次排便时间、自行排便次数、大量不保留灌肠次数、患者手术前晚的食欲、睡眠情况、肠道清洁程度。结果 两组服药后初次排便时间、自行排便次数、排便水样大便时间、大量不保留灌肠次数差异无统计学意义,患者手术前晚的食欲、睡眠情况和肠道清洁程度差异有统计学意义。结论 实验组术晨口服复方聚乙二醇电解质用于DG-HAL术术前肠道准备,手术前晚食欲、睡眠情况及肠道清洁程度均优于对照组。

关键词 痔 肠道准备 复方聚乙二醇电解质 DG-HAL 术

中图分类号 R473.6 文献标识码 A 文章编号 1673-6273(2012)24-4695-03

The Timing of Bowel Preparation before Doppler-Guided Hemorrhoid Artery Ligations

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ABSTRACT Objective: To investigate the timing of bowel preparation with polyethylene glycol (PEG) for Doppler-guided hemorrhoid artery ligations. **Methods:** In this prospective study, from July 2010 to June 2011, 120 patients were randomly assigned to two groups (60 patients per group): to drink PEG solution starting either at 16:00 p.m. before the operation day (control group) or at 4:30 a.m. (experimental group) on the operation day. The primary outcome measure was the time of initial defecation, the numbers of defecation, the numbers of large non-preserved enema, the patient's appetite, the situation of sleep, and the bowel cleanliness. **Results:** The time of initial defecation, the times of defecation, and the numbers of non-preserved enema was not different between groups. In the experimental group, the patient's appetite, the situation of sleep, and the bowel cleanliness were higher than that of the control group. **Conclusion:** To use the PEG at 4:30 a.m. on the operation day, the patient's appetite, the situation of sleep, and the bowel cleanliness was higher than that of using the PEG at 16:00 p.m. before the operation day.

Key words: Hemorrhoid; Bowel preparation; Polyethylene Glycol Electrolytes Powder

Chinese Library Classification: R473.6 **Document code:** A

Article ID: 1673-6273(2012)24-4695-03

痔是直肠下段粘膜下和肛管皮肤下的静脉丛淤血、扩张和屈曲所形成的静脉团^[1]。有症状的痔的治疗目的主要是纠正病理生理改变,解除症状。二十世纪末产生了DG-HAL术(Doppler-guided hemorrhoid artery ligations,DG-HAL)^[2,3]。DG-HAL术前肠道准备是十分必要的,肠道清洁直接影响到手术视野的暴露,并可以减少术后伤口感染和并发症发生,减轻术后腹胀和便秘^[4,6]。目前复方聚乙二醇电解质作为全肠道清洁的口服泻药已在临床广泛应用,但在口服复方聚乙二醇电解质在DG-HAL术前肠道准备时机研究中报道各不相同^[7-9]。为探索口服复方聚乙二醇电解质术前肠道准备的最佳时机,本研究采取前瞻性随机对照方法对2010年7月至2011年6月对120例行DG-HAL术患者,进行改进复方聚乙二醇电解质散口服时机与传统口服时机比较研究,现报告如下。

1 资料与方法

1.1 临床资料

从2010年7月至2011年6月共有120例II度IV度痔患者接受了DG-HAL术。按照事先产生的随机数字将患者随机分成两组,即对照组和实验组。对照组60例,男25例,女35例,平均年龄43.7岁,其中II度患者9例,III度患者36例,IV度患者15例。实验组60例,男27例,女33例,平均年龄45.2岁,其中II度患者11例,III度患者32例,IV度患者17例。两组患者性别、年龄、疾病程度比较,差异无统计学意义($P>0.05$)。病例选择标准:II度IV度痔患者且有相应的临床症状。

1.2 方法

1.2.1 肠道准备方法 将1盒复方聚乙二醇电解质散粉剂(内含A、B、C各1小包)倒入带有刻度的容器中。加温开水搅拌配成1L溶液。以每小时约1L的速度服药,再将第2盒粉剂同法配制,继续服用。两组服药方法相同。对照组组于手术前1天16:00开始服药,服药完成后直至排出清水样大便为肠道准备完

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(收稿日期 2012-01-30 接受日期 2012-02-25)

成。如果病人排便效果不佳,行大量不保留灌肠。手术前 1 天晚餐进食无渣半流质饮食,晚餐后 20:00 开始禁食,入睡后禁饮。次日上午行 DG-HAL 术。实验组手术前 1 天晚餐进食无渣半流质饮食,晚餐后 20:00 开始禁食,入睡后禁饮。手术当天 4 30 开始服药,手术当日晨禁食但不禁药,当日晨根据排便情况进行大量不保留灌肠。当日上午行 DG-HAL 术。

1.2.2 观察指标 观察服药后的初次排便时间、自行排便次数、排清水样大便时间、大量不保留灌肠次数;患者手术前晚的食欲、睡眠情况 肠道清洁程度。食欲判定方法:手术前晚晚餐胃纳情况与平时相比,无变化为正常,较平时少但仍大于平时半量为略差,少于平时半量为差^[10]。夜间睡眠情况以实际睡眠时间为标准。肠道清洁分度标准^[9,11-12]:优 肠道准备良好,全肠无粪渣或潴积少量清澈液体,视野清晰,不影响进镜及观察。

良 肠道准备较好,可有少量粪渣或潴积较多量清澈液体,视野尚清,不至于影响进镜及观察。一般 肠道准备欠佳,可有较多粪便粘附于肠壁或潴积有较多混浊粪便液体,视野模糊,影响进镜或肠壁的观察,有经验者勉强可进回盲部。差 肠道准备不佳,肠壁积满糊状便或粪水,很难进镜与观察。资料收集均在术后 24h 内由调查者完成。

1.2.3 统计方法 采用 SPSS16.0 软件进行数据处理,采用 t 检验和卡方检验, $P<0.05$ 差异有统计学意义。

2 结果

2.1 两组患者服药后排便情况比较 (见表 1)

2.2 两组患者进食睡眠情况比较 (见表 2)

2.3 两组患者肠道清洁度比较 (见表 3)

表 1 两组患者服药后排便情况比较

Table 1 Comparison of defecation between groups

Groups	Case(n)	The time of initial defecation (min)	The times of defecation	The time of clear water stool (h)	The times of non-preserved enemata (%)
Control	60	55.17± 22.10	5.80± 1.92	3.90± 1.65	2 (0.033)
Experiment	60	49.81± 15.10	5.50± 1.76	3.60± 1.46	1 (0.016)
		t=1.55	t=0.89	t=1.05	X ² =0.001
		P>0.05	P>0.05	P>0.05	P>0.05

表 2 两组患者食欲及睡眠情况比较

Table 2 Comparison of appetite and sleep between groups

Groups	Case(n)	Appetite on the day before operation			Time of sleep (h)
		Normal	Slightly worse	Worse	
Control	60	8	16	36	7.5± 1.15
Experiment	60	52	6	2	8.3± 1.31
		$\chi^2=67.23, P<0.01$			t=3.77, P<0.05

表 3 两组患者肠道清洁度比较

Table 3 Comparison of bowel cleanliness between groups

Groups	Case (n)	Excellent	Good	Fair	Inadequate
Control	60	40	12	5	3
Experiment	60	47	11	2	0
		$\chi^2=17.22, P<0.05$			

3 讨论

3.1 肠道准备

肠道准备是结直肠外科手术前准备的必要环节和手术成功的关键之一^[13]。复方聚乙二醇电解质是一种非吸收性、非分泌性、等渗的口服肠道清洗液^[6,11-12]。本研究显示两组患者在不同时间服药后,两组初次排便时间、自行排便次数、排清水样大便时间、大量不保留灌肠次数差异无统计学意义。口服复方聚乙二醇电解质起效快、服后约 1 h 开始排便,排便 5~6 次即可排尽大便,全程约 3~4h,少数排便效果不佳的患者需经大量不保留灌肠完成术前肠道准备。但是两组在肠道清洁程度方面差

异有统计学意义。分析原因:复方聚乙二醇电解质为全肠道口服清洗液,术日晨给予口服,增加了去除夜间宿便残留的可能,故肠道清洁效果优于对照组患者。

3.2 两组患者食欲及睡眠情况比较

本研究显示两组患者食欲及睡眠情况比较差异有统计学意义。在肠道准备中,临床护理人员往往关注于患者的肠道清洁程度,反而易忽视患者舒适度^[7,14,15]。患者术前 1 天晚餐食欲和夜间睡眠情况是患者舒适的两种具体体现。超声多普勒引导下痔动脉结扎术患者于手术前 1 天 16 30 开始进行肠道准备是常规做法,但是其影响晚餐食欲^[16,17]。由于频繁腹泻,造成的肛周疼痛不适,又进一步影响到患者的夜间睡眠质量,造成

实际睡眠时间的减少^[18,19]。于手术当日早 4 30 分开始进行肠道准备,较正常时间早起 1 小时,由于夜间睡眠质量的保证,实际睡眠时间并未减少。

3.3 肠道准备的时间

研究表明,超声多普勒引导下行痔动脉结扎术患者,术前采用手术日晨开始用口服复方聚乙二醇电解质散进行肠道准备,不影响手术前晚的晚餐食欲,夜间睡眠质量无明显影响,肠道清洁效果优于手术前 1 天下午开始进行肠道准备^[8, 18],对于患者来说,改善了患者耐受性,值得临床推广应用。

3.4 研究的不足

本研究显示口服复方聚乙二醇电解质行肠道准备,全程时间 3~4h。这与文献中全程时间 60~90min 观点不一致^[8, 13, 18]。这需要扩大样本量,做进一步研究。我们应重视患者的舒适度^[20,21],本研究关注了肠道准备中患者的食欲和睡眠情况,睡眠情况以实际睡眠时间来评判。对于睡眠情况的评判需要具体量化标准进一步研究。

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