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胆道镜联合腹腔镜治疗胆总管结石的疗效及预后 *

韩 磊 张 巍 郭 杨 周文平[△]

(沈阳军区总医院肝胆外科 辽宁 沈阳 110016)

摘要 目的:观察胆道镜联合腹腔镜治疗胆总管结石的临床疗效以及预后情况,探讨胆道镜联合腹腔镜在胆总管结石治疗中的意义。**方法:**选择我院收治的胆总管结石患者共 106 例,根据手术方案分为两组,其中实验组共 53 例,采取胆道镜联合腹腔镜手术治疗;对照组共 53 例,给予腹腔镜手术治疗,记录两组的手术相关情况、术后并发症以及住院情况,应用统计学软件对两组数据进行分析。**结果:**①实验组的手术时间短于对照组,术中出血少于对照组,术后胃肠功能恢复正常时间短于对照组,差异具有统计学意义($P < 0.05$);②实验组住院时间与住院费用均少于对照组,差异具有统计学意义($P < 0.05$);③实验组术后并发症发生率为 18.87%,显著低于对照组(35.85%),差异具有统计学意义($P < 0.05$)。**结论:**胆道镜联合腹腔镜能够安全有效的治疗胆总管结石。

关键词:胆道镜;腹腔镜;胆总管结石

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Curative Effect and Prognosis of Choledochoscope Joint Laparoscope in the Treatment of Common Bile Duct Calculi*

HAN Lei, ZHANG Wei, GUO Yang, ZHOU Wen-ping[△]

(Department of hepatobiliary surgery, General Hospital of Shenyang military area command, Shenyang, Liaoning, 110016, China)

ABSTRACT Objective: To observe the curative effect and prognosis of choledochoscope joint laparoscope in the treatment of common bile duct calculi, and then to explore its clinical application value in this disease. **Methods:** A total of 106 patients with common bile duct calculi of our hospital, according to the operation scheme were divided into two groups, 53 cases each group. The patients in the experimental group adopt choledochoscope combined laparoscopic surgery; and the patients in the control group were given laparoscopic surgery. The situation related to the operation, postoperative complications and hospitalization was recorded, and compared between two groups. **Results:** ① The operation time in the experimental group was significantly shorter than that of the control group, and the intraoperative bleeding was significantly less than that of the control group, and the time of postoperative gastrointestinal function recovery to normal was significantly shorter than that of the control group, all of these showed significant difference ($P < 0.05$); ② both of the time and cost of hospitalization in the experimental group were obviously less than that in the control group with significant difference($P < 0.05$); ③ the occurrence rate of postoperative complications in the experimental group was 18.87%, significantly lower than that of the control group (35.85%), and the difference was statistically significant ($P < 0.05$). **Conclusions:** Laparoscope joint choledochoscope can be safe and effective therapy to treat common bile duct calculi.

Key words: Choledochoscope; Laparoscope; Common bile duct calculi

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前言

胆总管结石主要是指人体胆总管内出现结石,其主要发好于胆总管下端,是临床极为常见的胆道系统疾病之一^[1]。我国是胆道结石病的高发国家,约有 1/10 的成人患有胆囊结石,而且约有 1/5 的患者并发胆总管结石^[2]。目前临床胆总管结石仍以手术治疗为主,传统治疗多采用开腹手术治疗,不仅手术损伤大,而且患者在治疗中极为痛苦,随着腹腔镜等微创手术适应症的拓宽,目前微创手术治疗胆总管结石已经受到临床诸多关

注^[3]。目前相关研究证实^[4,5],胆道镜联合腹腔镜为作为微创手术方式之一,不仅能够有效治疗胆总管结石,而且大大减轻了患者的痛苦,缩短了住院时间,对此笔者进行了一些相关性研究。本文通过分析应用胆道镜联合腹腔镜治疗胆总管结石的手术情况以及并发症情况,来探究胆道镜联合腹腔镜手术对胆总管结石患者的治疗意义,现将结果报道如下。

1 资料与方法

1.1 一般资料

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作者简介:韩磊,男,博士,副主任医师,主要研究方向:胆石病的微创治疗,电话:13309886261

△ 通讯作者:周文平,男,博士,主任医师,主要研究方向:肝胆胰疾病的微创治疗,电话:13309886261

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选取 2011 年 3 月份至 2013 年 9 月份期间我院肝胆外科以“胆总管结石”为诊断而收入院应用手术治疗的 106 例患者为观察对象,根据是否应用胆道镜分为两组,实验组和对照组,每组各 53 例。实验组包括男 23 例,女 30 例,年龄 18-60 岁,平均(48.7±7.3)岁;对照组包括男 22 例,女 31 例,年龄 20-59 岁,平均(49.2±6.9)岁。两组患者性别、年龄、结石位置以及结石大小等一般资料具有可比性($P>0.05$),差异不具有统计学意义。

1.2 纳入标准

经超声、CT 等影像学检查明确诊断为胆总管结石;术前未采取药物排石等治疗;心、肝、肺、肾等重要脏器功能正常;1 周内未应用抗生素;所有患者自愿参与,且对治疗及实验方案知情同意;本实验经由医院伦理委员会审批,且伦理委员会跟踪监督实验全过程。

1.3 排除标准

合并心脑血管疾病、肝肾功能异常等基础疾病;上腹部既往有手术史;无法耐受手术或麻醉;精神异常者。

1.4 治疗方法

实验组:(1)麻醉方式为气管插管全身麻醉,患者取仰卧头高位,常规进行消毒及铺巾后,依据腹腔镜下胆囊切除术的腹腔镜置入方法放置腹腔镜,充入 CO_2 建立气腹;(2)利用电凝钩以及超声刀逐层分离组织和肌肉,胆总管术野暴露充分后,选取 7 号穿刺针进行穿刺,若抽出胆汁则证实是胆总管;(3)取 1 块消毒纱布,放置在网膜孔处,以尽可能避免胆汁以及结石进入小网膜囊;(4)作一长约 15 mm 的纵行切口,切开胆总管,利用取石钳取出胆总管结石;(5)腹腔镜辅助下置入胆道镜(从剑突下),行胆总管探查术,同时进行网篮套石,将结石置入收集袋,避免结石流失;(6)结石取净后,生理盐水冲洗胆总管,选择适宜 T 管待修剪成型后从剑突下置入,钳将短臂分别放置到胆总管内后,用可吸收线进行间断全层缝合,T 形管经右锁骨中线引出体外,管腔内注射 50 mL 生理盐水,观察胆总管缝合处是否存在渗漏;(7)行胆囊切除术,止血彻底,生理盐水冲洗,吸尽冲洗液;(8)引流管放置于小网膜孔,从右肋腋前线处引出;

(9)取出胆囊以及结石收集袋,放尽气体,查无异常,取出器械,缝合切口,敷料覆盖伤口后固定,标识引流管。

对照组:首先行经内镜逆行性胰胆管造影术(ERCP)。术前哌替啶 50 mg 肌注。器械常规消毒,经表面麻醉后,将十二指肠镜插至十二指肠降部,找到胆管开后,在透视镜下将造影剂注入胆管进行造影,以确定结石位置与形态。手术方法:(1)麻醉方式、体位以及气腹建立方式同实验组。采用四点穿刺法放置腹腔镜器械;(2)常规入腹后,解剖游离胆囊管以及胆囊动脉,剪断胆囊动脉后,分离胆囊床使胆囊完全游离;(3)肝门部严重粘连者可,胆囊管不切除,用作牵引;肝门部解剖结构清晰者切除胆囊,充分暴露胆总管,切开胆总管,显露胆总管后,穿刺针抽吸胆总管,证实液体为胆汁即可确认为胆总管;(4)沿穿刺方向,电钩电凝切开一道纵行线,切开胆总管前壁,切口长度略大于最大胆总管结石直径;(5)在无血管区切开胆总管,直接钳取结石,取完结石后用生理盐水对胆道进行冲洗,并常规留置 T 形管,流水试验证实缝合处无渗漏后,将引流管放置到温氏孔处引流,冲洗术野,放净气体,撤出器械,缝合切口,标记引流管。

1.5 观察指标及判定标准

观察并记录两组的手术相关情况(主要包括手术时间、术中出血、术后胃肠功能恢复时间)以及住院情况(住院时间和治疗费用),同时跟踪随访 1 年,观察并发症情况(主要为疼痛、感染、胆漏以及结石残留)发生情况。

1.6 统计学方法

实验数据分析应用统计学分析软件 SPSS.15.0,计量资料为 t 检验分析,计数资料为卡方检验分析, $P<0.05$ 差异显著,有统计学意义。

2 结果

2.1 两组患者手术相关情况比较

实验组患者的手术时间、术中出血量以及术后胃肠功能恢复时间均显著优于对照组,差异具有显著性($P<0.05$),提示实验组患者的手术危险性更小。详见表 1。

表 1 两组患者手术一般情况比较

Table 1 Comparison of general data of operation between the two groups($\bar{x} \pm s$)

Group	Operation time (min)	Blood loss (mL)	Gastrointestinal function recovery (d)
Experimental group	108.66±36.89 [#]	34.27±10.39 [#]	1.84±0.95 [#]
Control group	142.52±35.47	56.43±16.87	3.73±1.21

Note: [#] $P<0.05$, compared with control group.

2.2 两组患者住院情况比较

实验组患者的住院时间以及住院费用均显著低于对照组,

差异具有显著性($P<0.05$)。详见表 2。

表 2 两组患者住院情况比较

Table 2 Comparison of hospitalizations between the two groups

Group	Hospitalization (d)	Costs (yuan)
Experimental group	6.47±1.26 [#]	8236.56±365.74 [#]
Control group	10.45±2.31	9439.63±379.86

Note: [#] $P<0.05$, compared with control group.

2.3 两组患者并发症情况比较

跟踪随访 1 年,两组患者术后均见疼痛、感染、胆漏以及结石残留等并发症,实验组共有 10 例患者出现并发症(疼痛 3 例,感染 2 例,胆漏 3 例以及结石残留 2 例),并发症发生率为

18.87%;对照组共有 18 例出现并发症(疼痛 6 例,感染 5 例,胆漏 4 例以及结石残留 4 例),并发症发生率为 35.85%。实验组患者并发症的发生率明显低于对照组,差异具有统计学意义($P<0.05$)。见表 3。

表 3 两组患者并发症情况比较

Table 3 Comparison of postoperative complications between the two groups

Group	n	Pain	Infection	Bile leakage	Residual stones	Total rate(%)
Experimental group	53	3	2	3	2	18.87*
Control group	53	6	5	4	4	35.85

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

3 讨论

近年来,随着物质生活的改善,人们饮食习惯出现了明显改变,胆道结石的发生率呈逐年递增趋势^[6]。胆总管结石作为临床最为常见的胆道结石之一,目前尚不完全明确其发生发展的相关机制,但是临床普遍认为其与胆道感染关系极为密切^[7]。胆总管结石能够导致胆道出现梗阻,胆汁无法排出,淤积于内,为细菌快速繁殖提供便利环境,引发胆管炎症,进一步加重细菌增殖扩散,侵袭到其他脏器则引发脏器感染,严重者甚至威胁生命^[8]。胆总管结石主要采取手术取石治疗,其中最为传统的方法就是经腹行胆总管切开取石以及 T 管引流^[9]。目前在临床上治疗方法主要为传统的开腹手术法,虽然传统开腹手术能够对患病部位进行准确定位,且手术适应症宽泛,无需其他昂贵仪器辅助,但是由于存在手术切口较长、创伤大、术后感染等并发症发生率高以及术后恢复慢,住院时间长等诸多缺点^[12,13],不仅患者需要承受长时间病痛的折磨,严重降低生活质量,而且长时间住院治疗极大加重了患者经济负担。随着医学及微创手术的发展进步,腹腔镜技术以及胆道镜技术得到不断提升,目前已经广泛应用到临床各科疾病的治疗之中。对于大多数胆总管结石合并胆囊结石患者,选取 ERCP 联合腹腔镜进行治疗已变成一种趋势。ERCP 联合腹腔镜是安全有效的,它是一种创伤小、恢复快的治疗手段,在治疗效果上明显优于传统开腹术,因此本试验中对比选取 ERCP 联合腹腔镜的手术方法,而非传统开腹术,更真切地体现对比手术方法的优越性。而作为胆管结石治疗新兴手术方式之一,接受腹腔镜联合胆道镜手术的患者住院时间大大缩短,且手术过程方便安全、出血情况较少、危险的可能性较传统方法显著降低,术后并发症也明显减少^[14,15]。为了进一步探讨腹腔镜联合胆道镜手术与腹腔镜治疗胆总管结石的差异性,本文选取胆总管结石作为研究对象,对两种手术治疗的手术相关情况、术后恢复情况以及并发症进行对比分析。

本实验中,两组患者均未出现中转开腹手术的病例,所有患者均成功进行手术,但是实验组患者的手术所需时间、术中出血量以及术后胃肠恢复时间均明显少于对照组,提示双镜联合治疗能够有效缩短手术时间,减少术中出血,利于患者胃肠功能恢复,其手术的安全性更好^[16];两组患者住院情况比较显示:实验组患者的住院时间以及住院费用均明显少于对照组,提示双镜联合手术治疗胆总管结石不仅术后恢复快,而且治疗

费用较低,能够显著减轻患者的经济负担^[17];两组患者并发症发生情况比较显示:实验组患者并发症发生率明显低于对照组,差异具有显著性($P<0.05$),提示双镜联合治疗能够显著减少并发症,提高手术安全性以及治疗效果^[18]。有研究证实^[14,15],腹腔镜联合胆道镜手术治疗胆总管结石,不仅能够显著提升治疗效果,缩短治疗时间,而且能够减少并发症,提高治疗安全性。我们的结果与此相符。全勇辉^[19]等人通过对胆总管结石合并胆囊结石患者进行调查,结果发现应用腹腔镜联合胆道镜手术患者手术时间、术中出血量、术后恢复时间以及术后并发症均明显减低。研究也证实,腹腔镜联合胆道镜手术的治疗效果明显高于开腹手术^[20]。

本实验对照组采用本院常规应用的 ERCP 联合腹腔镜治疗胆总管结石,但 ERCP 是采用造影剂对病灶进行造影,由于特殊的解剖关系以及结石形态等,造影常常与实际形成一定的误差,而且在结石完全梗阻的情况下,造影剂无法进入胆管进行造影,对手术造成更大的影响。双镜联合能够更加直观的对胆管内结石情况进行观察,以选取更好的手术方法治疗疾病。

综上所述,胆道镜联合腹腔镜作为临床常见治疗胆总管结石微创手术之一,不仅能够有效取石,而且手术安全性高、术后恢复快、疗效与预后情况均大为改善,值得临床进一步推广。

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