精准肝蒂解剖法肝段切除术的临床疗效研究

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[摘 要] **目的** 对比精准肝蒂解剖法肝段切除术和非规则性肝切除法治疗肝癌的疗效及安全性,分析精准肝蒂解剖法肝段切除术的临床应用价值。**方法** 选取 2009 年 3 月至 2013 年 3 月期间在我院住院治疗的肝细胞性肝癌患者 120 例,对其临床资料进行回顾性分析,根据患者的病情特点及治疗需要分为实验组和对照组,实验组患者的治疗方法是精准肝蒂解剖法肝段切除术,对照组则为非规则性肝切除术。比较 2 种手术方法的疗效、并发症以及复发率情况。**结果** 实验组患者的手术时间、术中出血量、住院时间及住院费用均小于对照组,2 组比较差异具有统计学意义($P<0.05$)。实验组的并发症发生率为 10.0%,复发率为 13.3%;对照组的并发症发生率为 33.3%,复发率为 35.0%,2 组比较差异具有统计学意义($P<0.05$)。实验组的谷草转氨酶和谷丙转氨酶水平明显低于对照组,2 组比较差异具有统计学意义($P<0.05$)。**结论** 精准肝蒂解剖法肝段切除术的疗效显著,并发症发生率低,不易复发,具有一定的临床应用价值。

[关键词] 精准肝蒂解剖法;非规则性肝切除术;临床疗效;并发症
[中图分类号] R657.3 [文献标识码] A [文章编号] 1672-5042(2015)01-0063-03

Clinical efficacy analysis on the precise hepatic pedicle dissection in anatomical hepatic segmentectomy

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Abstract: Objective To compare the efficacy and safety of precise hepatic pedicle anatomic hepatectomy and the irregular hepatectomy method, and to analyze the clinical application value of precise hepatic pedicle dissection. **Methods** The clinical data of 120 patients with hepatocellular carcinoma treated in our hospital from Mar. 2009 to Mar. 2013 were analyzed retrospectively, and they were divided into the experimental group and the control group according to the patients' clinical characteristics and their needs of treatment. The experimental group were given precise hepatic pedicle dissection, while the control group were given irregular liver excision. The effect, complications and recurrence rate of the two methods were compared. **Results** The operation time, the volume of blood during operation, hospitalization time and the cost of hospitalization of the experimental group were were less than those of the control group with statistically significant difference between the two groups ($P<0.05$). The incidence of complications in the experimental group was 10.0%, recurrence rate was 13.3%; whereas in the control group, the incidence rate was 33.3%, the recurrence rate was 35%, it is of significant differences between the two groups ($P<0.05$). The aspartate aminotransferase and alanine aminotransferase levels of the experimental group were significantly lower than those of the control group with a statistically significant difference ($P<0.05$). **Conclusion** The precise hepatic pedicle dissection is of significant efficacy, low complication and relapse rate, and it is of certain clinical application value.

Keywords: precise hepatic pedicle anatomy; irregular hepatectomy; clinical curative effect; complications

精准肝蒂解剖法肝段切除术是在确保剩余肝解剖结构和功能最优化的前提下实施的切除术,非规则性肝切除术则是不以肝段、肝叶为单位实施的切除方法。精准肝蒂解剖法肝段切除术要求外科医生熟悉第一肝门的解剖结构,其手术操作比较简便,不需要昂贵的医疗器械,与非规则性肝切除术相比可以减少手术出血量,节省住院时间和费用,降低术后并发症发生率和复发率[1]。因此,精准肝蒂解剖法肝段切除术在临床治疗中的应用日益广泛。本文针对精准肝蒂解剖法肝段切除术和非规则性肝切除法治疗肝癌的疗效以及安全性进行分析,现报告如下。

doi:10.11659/jjssx.06E013817
[收稿日期] 2014-03-02 [修回日期] 2014-03-28

1 资料与方法

1.1 临床资料

选取 2009 年 3 月至 2013 年 3 月在我院住院治疗的肝细胞性肝癌患者 120 例,其中男 65 例,女 55 例,年龄 36~58 岁,平均(43.98±7.25)岁。所有患者确诊患有肝细胞性肝癌,其中实验组 60 例采取精准肝蒂解剖法肝段切除术,对照组 60 例采取非规则性肝切除术。2 组患者的年龄、性别以及疾病情况无显著性差异($P>0.05$),具有可比性。

1.2 方法

2 组患者术前进行手术风险评估,根据 CT 和 MRI 影像评估患者的病变局部与重要脉管的关系。实验组患者均是采取精准肝蒂解剖法肝段切除术,根据术前影像学检查结果,常规阻断拟被切除病变肝段或肝叶的入肝血流,解剖出通往肝段的格林森蒂,阻断后肝段血流,确定肝切除平面,从而顺利切除肝

段和肝叶。在施行半肝切除时,应分别解剖出预切除侧的肝动脉和门静脉并结扎,出现半肝缺血时确定肝切除平面,以静脉作为引导标志,完成半肝切除。肝脏切除时切断动脉可能导致出血过多,应采用 Pringle 手法或者阻断入肝血流以控制出血量。手术时应注意肝动脉可能出现的变异情况,并对肝脏的剩余体积和功能进行评估。手术中精确处理肝断面,精准切除肿瘤,最大限度保障残余肝脏的功能和血供。对照组的患者采取非规则性肝切除术,术中阻断第一肝门,大块钳夹肝组织,缝扎创面。为了减少炎性反应造成的器官损伤,2 组患者术后均进行引流处理。

1.3 观察指标

观察 2 组患者手术时间、术中出血量、住院时间、住院费用、术后并发症的发生情况、复发情况以及肝功能情况。

1.4 统计学处理

使用 SPSS 13.0 统计软件进行统计学分析,计数资料采用 χ^2 检验,计量资料采用 t 检验,以 $P<0.05$ 表示差异具有统计学意义。

2 结果

2.1 患者相关指标情况

实验组患者手术时间、术中出血量、住院时间以及住院费用均明显小于对照组,2 组相比较差异具有统计学意义($P<0.05$),见表 1。实验组无死亡病例,对照组有 1 例患者死亡。

表 1 2 组患者相关指标统计结果($n=60$)

组别	手术时间 (min)	出血量 (mL)	住院时间 (d)	住院费用 (万元)
实验组	240.6 ± 60.3	558.3 ± 90.6	12.1 ± 3.2	1.8 ± 0.7
对照组	172.5 ± 41.4	726.7 ± 88.7	24.6 ± 7.5	2.1 ± 0.9
t	5.783	8.974	10.352	4.963
P	<0.05	<0.05	<0.05	<0.05

2.2 患者肝功能及并发症发生情况

实验组患者术后的谷草转氨酶(AST)和谷丙转氨酶(ALT)分别为(129.3 ± 70.6)U/L、(109.9 ± 52.1)U/L,对照组分别为(425.4 ± 312.0)U/L、(392.0 ± 240.2)U/L,实验组明显低于对照组,2 组间差异具有统计学意义($P<0.05$)。实验组患者术后并发症发生率为 10.0%,对照组的发生率为 33.3%,2 组比较差异具有统计学意义($P<0.05$),见表 2。

表 2 两组患者术后并发症发生情况(例)

组别	切口感染	腹腔出血	肝功能衰竭	胆瘘	总例数
实验组	3	2	1	2	6
对照组	9	5	3	4	20
χ^2					9.624
P					<0.05

2.3 患者复发情况

随访 1 年后,实验组患者 8 例复发,复发率为 13.3%;对照组患者 21 例复发,复发率为 35.0%,2 组比较具有统计学意义($P<0.05$)。

3 讨论

精准肝切除是解剖性肝切除的重要手术方式,而解剖性肝段切除是其中的理想术式[2]。精准肝蒂解剖法在操作中未阻断残肝的血流,最大限度地防止了残肝细胞因缺血缺氧造成的水肿、变性、坏死[3]。蔡守旺等[2]在相关研究中报道,精准肝蒂解剖法肝段切除术是在确保剩余肝解剖结构和肝功能最优化的前提下彻底切除肿瘤,并且最大限度地控制术中出血量以及手术所造成的全身性创伤,从而最终使患者获得最佳手术效果,在最短时间内获得康复。为保证手术的顺利进行,术前影像学检查十分重要,其目的主要是确定肿瘤的位置,明确肿瘤与血管的关系,并能够精确测算出残余肝的质量和体积,为切除肿瘤提供关键性依据。当患者肿瘤较大、病情较复杂时,充分的术前准备同样可以为实施精准肝蒂解剖法肝段切除术提供重要依据[4]。

本组资料显示,精准肝蒂解剖法肝段切除术与常规的非规则性肝切除术相比,可以减少术中出血量、术后住院恢复时间以及住院费用,减轻患者的痛苦和经济负担,降低术后并发症的发生率以及复发率,提高患者的治疗效果。同时,患者术后的肝功能检测结果表明,精准肝蒂解剖法肝段切除术治疗后,患者的谷草转氨酶和谷丙转氨酶水平明显低于非规则性肝切除术,有利于患者术后肝功能的恢复。另外,精准肝蒂解剖法肝段切除术患者术后并发症发生率明显低于非规则性肝切除术,安全性高,对患者创伤较小[5-7]。精准肝蒂解剖法效果显著的关键在于彻底切除病灶的同时能够保留重要血管,精准地划分病灶界线,避免过多切除正常肝组织和损伤肝静脉。精准肝蒂解剖法在充足的时间内充分细致地进行肝内解剖,分离肝组织,而非规则性肝切除则是以切除病灶为主要目的,手术中常常为避免过多切除肝组织而不能准确划定切除的范围,导致不能完全切除病灶。

综上所述,精准肝蒂解剖法肝段切除术治疗肝细胞性癌症患者创伤小,恢复快,节省住院时间和医疗费用,减轻患者的心理和经济负担,术后并发症的发生率低,不易复发,对肝功能的损伤小[8-11]。

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Aegisy 可回收滤器在下肢深静脉血栓形成治疗中的应用

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[摘 要] **目的** 探讨在下肢深静脉血栓治疗中应用 Aegisy 式可回收滤器的临床效果。**方法** 选取我院创伤骨科收治的急性或亚急性单侧下肢深静脉血栓形成(DVT)患者 92 例,Aegisy 滤器经股静脉植入下腔静脉,第 2 天开始进行溶栓治疗,治疗后 10 ~15 d 观察患者患肢愈合情况,采用超声以及血管造影证实下肢静脉内无新鲜或游离血栓,采用抓捕器将 Aegisy 可回收滤器取出,下肢静脉造影术复查,并同时抗凝治疗。**结果** 全部患者置入成功,Aegisy 滤器释放均无明显前跳和回缩现象,介入治疗及造影复查过程中,滤器无移位。置入滤器时间平均(16.8 ± 1.3) d,89 例患者回收滤器成功。下肢深静脉血栓患者经治疗效果明显,疼痛减轻,无肺动脉栓塞症状。**结论** Aegisy 可回收滤器能够明显改善下肢深静脉血栓临床症状,具有置入定位准确、捕获血栓能力高、回收成功率高等优点,对临床具有指导意义。

[关键词] 可回收滤器;下肢深静脉血栓;临床疗效
[中图分类号] R654.4 [文献标识码] A [文章编号] 1672-5042(2015)01-0065-03

Aegisy recyclable filter formed in the treatment of deep venous thrombosis of lower extremity

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Abstract: Objective To investigate the therapeutic efficacy of Aegisy retrievable filter in inferior vena cava interventional treatment for acute deep venous thrombosis of lower extremity. **Methods** Acute or sub acute unilateral lower extremity deep vein thrombosis (deep vein thrombosis, DVT) patients in our hospital were selected, and Aegisy filter was put into the inferior vena cava through the femoral, and thrombolytic therapy was carried out in the next day. Limb conditions was observation after 10 to 15 days, confirmed by vascular ultrasound and angiography of lower limb vein after no fresh or free thrombus. The filter was removed with protector, anticoagulant therapy after review the venography of lower limb postoperative. **Results** All Aegisy filter were put into patients, and there were no obvious forward jumping and drawing back occurred during the release of the filters, and all Aegisy filter had a better position. Placement of a filter everage time was (16.8 ± 1.3) days, 89 cases were successfully recovery filter. The effct of Aegisy filter on the patients with lower extremity deep venous thrombosis after treatment is obvious effect, no pain, and no symptom of pulmonary embolism. **Conclusion** Aegisy retrievable inferior vena cava filter has many advantages in clinical use. The filter can be placed to the scheduled position accurately, and it is very powerful in capturing the thrombus, it can be hold in the inferior vona cava for long time before it is planed to be retrieved, and its retrieval success is very high. Moreover, with high technieal successful rate the implantation of Aegisy retrievable inferior vena cava filter is very safe and effective for the interventional treatment of acute deep venous thrombosis of lower extremity.

Keywords: recyclable filter; deep venous thrombosis of lower extremity; clinical curative effect

doi:10.11659/jjssx.06E014283
[收稿日期] 2014-08-02 [修回日期] 2014-08-28

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(编辑:雷 艳)