doi: 10.13241/j.cnki.pmb.2017.05.024

胆道支架置入联合介入化疗对恶性胆道梗阻患者肝功能及预后的影响

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摘要 目的：研究胆道支架置入联合介入化疗对恶性胆道梗阻患者肝功能及预后的影响，为临床治疗提供依据。**方法**：选取 2013 年 2 月到 2015 年 2 月我院收治的恶性胆道梗阻患者 90 例，按照随机数字表法将患者分为 I 组、II 组和 III 组，每组 30 例，I 组给予胆道支架置入联合介入化疗，II 组给予单纯胆道支架置入，III 组给予保守治疗，比较三组治疗前、后肝功能、并发症、支架通畅率及生存期。**结果**：治疗前三组谷草转氨酶（AST）、谷丙转氨酶（ALT）、γ- 谷氨酰转移酶（r-GT）比较无统计学意义（P＞0.05），治疗后 I 组和 II 组 AST、ALT 和 r-GT 均显著改善，与治疗前和 III 组比较差异具有统计学意义（P＜0.05），且 I 组显著优于 II 组，比较差异具有统计学意义（P＜0.05），III 组治疗后 AST、ALT 和 r-GT 与治疗前比较差异无统计学意义（P＞0.05）；I 组、II 组和 III 组并发症发生率比较无统计学意义（P＞0.05）；I 组术后 3 个月、6 个月和 12 个月支架通畅率均显著高于 II 组，比较差异具有统计学意义（P＜0.05）；I 组生存期显著高于 II 组和 III 组，II 组高于 III 组，比较差异具有统计学意义（P＜0.05）。**结论**：胆道支架置入联合介入化疗治疗恶性胆道梗阻具有较好效果，能明显改善患者肝功，延长患者生存期。

关键词：胆道支架置；介入化疗；恶性胆道梗阻；肝功能
中图分类号：R735.8 **文献标识码**：A **文章编号**：1673-6273(2017)05-895-03

Effect of Biliary Stent Implantation Combined with Interventional Chemotherapy on Liver Function and Prognosis in Patients with Malignant Biliary Obstruction

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ABSTRACT Objective: To study the effect of biliary stent implantation combined with interventional chemotherapy on liver function and prognosis in patients with malignant biliary obstruction, to provide basis for clinical treatment. **Methods:** 90 patients with malignant biliary obstruction treated in our hospital from February 2013 to February 2015 were selected, the patients were divided into group I, group II and group III according to the random number table method, 30 cases in each group, group I was given biliary stent placement combined with interventional chemotherapy, group II was treated with simple biliary stent implantation, Group III was given conservative treatment. The liver function, complications, stent patency rate and survival time of three groups before and after treatment were compared. **Results:** Aspartate aminotransferase (AST), alanine aminotransferase (ALT) and gamma glutamyl transfer enzyme (r-GT) before treatment in the three groups were no significant differences (P>0.05), The r-GT, ALT and AST after treatment were significantly improved in group I and group II, compared with before treatment and group III, the differences were statistically significant (P<0.05), and the group I was significantly better than the group II,the difference was statistically significant (P<0.05), There were no significant differences of AST, ALT, r-GT before and after treatment in the group III (P>0.05); The incidence of complications in group I, group II and group III was not statistically significant (P>0.05); The stent patency rate at 3 months, 6 months and 12 months after operation of group I was significantly higher than that of group II, the difference was statistically significant (P<0.05); The survival time of group I was significantly higher than that of group II and group III, group II was higher than group III, the difference was statistically significant

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（收稿日期：2016-07-14 接受日期：2016-08-10）

(P<0.05). **Conclusion:** Biliary stent implantation combined with interventional chemotherapy in the treatment of malignant biliary obstruction has a good effect, which can significantly improve liver function, prolong the survival time of the patients.

Key words: Biliary stent placement; Interventional chemotherapy; Malignant biliary obstruction; Liver function

Chinese Library Classification(CLC): R735.8 Document code: A

Article ID: 1673-6273(2017)05-895-03

前言

肝胆胰腺区域解剖特点较复杂，肿瘤生物学特性也较复杂，因此恶性胆道梗阻被确诊时多处于晚期，失去了最佳手术时机[1]。因此，临床上多采用保守治疗，但是保守治疗效果欠佳，患者生存期较短。内镜下胆道支架置入术是近年来发展的新技术，是临床上治疗恶性胆道梗阻的重要方法，但是单纯胆道支架置入术效果不理想[2,3]。因此，试图在胆道支架置入术的基础上联合其他治疗方式。介入化疗是临床上治疗肿瘤的姑息疗法，可以通过局部给予起到杀灭肿瘤细胞的作用，改善患者的生活质量，延长患者的生存期[4]。因此，本研究旨在分析胆道支架置入联合介入化疗对恶性胆道梗阻患者肝功能的影响，并观察其对预后的影响，为临床治疗提供依据。

1 资料与方法

1.1 一般资料

选取 2013 年 2 月到 2015 年 2 月我院收治的恶性胆道梗阻患者 90 例，纳入标准：所有患者均经 CT、MRI 等检查，并经病理确诊为恶性肿瘤，术前均存在胆管扩张和梗阻；排除标准：不配合治疗者，同时合并其他恶性疾病者，严重血液系统疾病者，严重肝炎者。按照随机数字表法将患者分为 I 组、II 组和 III 组，每组 30 例，I 组男性 13 例，女性 17 例，年龄介于 50-85 岁，平均年龄为(64.6± 4.2)岁；II 组男性 12 例，女性 18 例，年龄介于 50-85 岁，平均年龄为(64.4± 2.5)岁；III 组男性 12 例，女性 18 例，年龄 50-80 岁，平均年龄为(64.6± 6.2)岁，三组年龄和性别比较差异无统计学意义(P＜0.05)，具有可比性，研究经医学伦理会批准，所有患者家属均知情同意并签署知情同意书。

1.2 方法

所有患者均经磁共振胰胆管造影检查，III 组给予常规放化疗治疗，根据患者的情况选择合适的放化疗药物。I 组：给予胆道支架置入联合介入化疗治疗，具体做法如下：根据胆管扩张情况以及肿瘤部分选择穿刺点，穿刺点避免肿瘤及肝、胆囊组织，穿刺成功后先进行胆管造影，然后在 X 线透视下进行左、右肝管穿刺插管，交换导丝探查梗阻段是否可以成功通过，然后经过十二指肠乳头到十二指肠，然后跟进导管再进行造影，确定梗阻长度和程度，然后选择合适直径和长度的支架，支架放置完毕以后再次造影确保胆汁流动正常。经股动脉穿刺，经特制的导管在 X 线引导下直接插入肿瘤供血动脉，然后灌注特定有效抗癌药物直接杀伤癌细胞。II 组：只给予单纯胆道支架置入术治疗，具体操作同 I 组。

1.3 观察指标

治疗前和治疗 1 个月后抽取患者清晨空腹静脉血约 3 mL，将其放置于离心机上以 3000 r/min 速度离心 10 min，取上清液放置在 EP 管中保持在 -20℃环境中，检测血清中谷草转氨酶(AST)、谷丙转氨酶(ALT)、γ- 谷氨酰转移酶(r-GT)，比较三组并发症和生存期，I 组和 II 组 3 个月、6 个月和 12 个月支架通畅率。

1.4 统计学方法

应用 SPSS17.0 软件统计分析数据，其中计量资料用($\bar{x}$± s)表示，应用 t 检验，计数资料应用 x^2 检验，以 P<0.05 表示有统计学意义。

2 结果

2.1 三组肝功能比较

治疗前三组 AST、ALT、r-GT 比较无统计学意义（P＞0.05），治疗后 I 组和 II 组 AST、ALT 和 r-GT 均显著改善，与治疗前和 III 组比较差异具有统计学意义(P＜0.05)，且 I 组显著优于 II 组，比较差异具有统计学意义（P＜0.05），III 组治疗后 AST、ALT 和 r-GT 与治疗前比较差异无统计学意义（P＞0.05）。见表 1。

表 1 三组治疗前和治疗后肝功能比较

Table 1 Comparison of liver function between three groups before and after treatment

Groups	Time	AST(U/L)	ALT(U/L)	r-GT(U/L)
Group I	Before treatment	159.3± 10.4	125.3± 6.8	485.6± 12.3
	Ater treatment	51.8± 3.5^{abc}	31.4± 5.2^{abc}	115.9± 6.4^{abc}
Group II	Before treatment	158.9± 8.9	125.2± 5.9	484.8± 10.8
	Ater treatment	80.5± 3.7^{ab}	48.3± 4.6^{ab}	163.7± 13.4^{ab}
Group III	Before treatment	158.4± 7.4	124.7± 6.3	483.9± 11.6
	Ater treatment	152.8± 6.9	120.9± 8.9	481.5± 14.2

Note: compared with before treatment, ^{a}P＜0.05; compared with group III, ^{b}P＜0.05; compared with group II, ^{c}P＜0.05.

2.2 三组并发症比较

I 组因手术操作出现 1 例胆管炎，1 例淀粉酶升高，II 组因手术操作出现 1 例胆管炎，均经保守治疗后好转，无严重并发症发生，III 组无明显并发症发生，三组并发症发生率比较无统计学意义(P＞0.05)。

2.3 I 组和 II 组支架通畅情况比较

I组术后3个月、6个月和12个月支架通畅率均显著高于II组，比较差异具有统计学意义（P＜0.05）。见表2。

表2 I组和II组支架通畅情况比较[n(%)]

Table 2 Comparison of stent patency in I group and II group [n(%)]

Groups	Cases	3 months	6 months	12 months
Group I	30	25(83.33)	16(53.33)	10(33.33)
Group II	30	21(70.00)	12(40.00)	4(13.33)

Note:compared with group II, $^{a}P<0.05$.

2.4 三组生存期比较

I组生存期为(12.7± 3.2)个月显著高于II组的(8.1± 0.5)个月和III组(2.3± 0.5)个月，II组高于III组，比较差异具有统计学意义（P＜0.05）。

3 讨论

恶性胆道梗阻多由胆管癌、肝癌、胰头癌、壶腹癌等引起，多数患者确诊时已经处于晚期，且由于生理解剖和肿瘤学等原因，多数患者确诊时已经失去手术的时机[5]。即使进行姑息性手术也会给患者带来较大创伤，术后并发症多，患者生存期缩短，因此多数患者及家属接受保守治疗[6,7]。经皮穿刺胆道引流术是临床上的常见方法，可以较好改善对肝功能损伤作用，但是胆汁不停外流，对消化功能具有较大影响，给日常护理带来较大困难，且会有部分导管堵塞和脱落，给患者日常生活带来较大影响，患者治疗依从性往往较小[8]。内镜下胆道支架置入术是不能行手术治疗恶性胆道梗塞患者首选，已被国内外多数学者所认同[9,10]，能明显改善患者的临床症状，提高患者的生活质量。但是，该治疗方式并未治疗肿瘤本身，对肿瘤的生长也无影响，因此远期效果较差[11]。

因此，本研究试图在胆道支架置入术的基础上联合其他治疗来抑制肿瘤生长，介入化疗是利用介入技术，将抗肿瘤药物塞入肿瘤供血血管，使其直达肿瘤病灶，对肿瘤具有局部杀伤作用，能明显降低对其他部分正常细胞的损伤作用[12,13]。本研究显示，治疗后I组和II组肝功能明显改善，且I组肝功能改善更明显，说明胆道支架置入联合介入化疗治疗恶性胆道梗阻患者能明显改善患者的肝功能，分析其原因为[14,15]：胆道支架置入术可以将梗阻胆道通开，降低因胆道堵塞胆汁回流异常引起的肝功能异常，且介入化疗能对肿瘤细胞进行杀伤，能降低因肿瘤过度增长堵塞胆道的可能性；且研究显示，I组、II组因手术带来的并发症较少，说明胆道支架置入联合介入化疗对患者具有一定安全性；随着时间的延长，胆道支架置入术会出现胆道梗阻，梗塞的原因有[16,17]：肿瘤经支架网眼生长引起胆管阻塞；肿瘤纵向发展引起支架近端堵塞；胆汁淤积或肿瘤坏死组织引起支架阻塞。研究显示，I组术后3个月、6个月和12个月支架通畅率均显著高于II组，说明胆道支架置入联合介入化疗治疗恶性胆道梗阻能有效改善支架通畅情况，分析其原因为[18,19]：I组患者在行胆道支架置入术的同时联合介入化疗治疗，介入化疗可以局部抑制肿瘤生长，能对原发病进行积极控制，因此支架阻塞率会明显降低。本研究还显示，I组生存期最长，明显高于II组和III组，II组显著高于III组，说明胆道支架置入术治疗恶性胆道梗阻相比单纯保守治疗效果好，且胆道支架置入术联合介入化疗效果更好，分析其原因为[20]：胆道支架置入术可以有效解除胆道梗阻，同时辅助介入化疗能有效降低肿瘤生长，改善原发病，进而明显延长患者生存时间。

综上所述，胆道支架置入术联合介入化疗具有较好的效果，能明显改善患者肝功能，改善患者的预后。

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