

恶性梗阻性黄疸的双介入治疗

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摘要:目的:本文通过双介入法(经皮经肝胆道引流术和经动脉化疗栓塞术)在恶性梗阻性黄疸病人治疗中的研究,对双介入法作一评价。材料和方法:我院从 1987 年至 1996 年共有 82 例恶性梗阻性黄疸病人接受了介入治疗。其中 28 例为单纯的经皮经肝胆道引流术(PTBD),归为 A 组;另外 54 例在 PTBD 术后 2 周左右接受了经动脉化疗术(TAI)和/或化疗栓塞术(TAI+TAE),归为 B 组。所有病人都通过多种影像学、外科或生物活检诊断为恶性梗阻性黄疸。所有的病人均获随访。两组疗效进行比较。结果:在 PTBD 术后 15~20 天内,所有病人血清胆红素水平明显下降,肝功能好转。A 组病人,中位生存期为 3.6 个月,均无胆道梗阻再通。B 组,中位生存期为 10.2 个月,其中 31 例(57.4%)在 2~4 次 TAI 和/或 TAE 后显示胆道梗阻再通。其中 9 例在拔除引流管后 5~51 个月中无黄疸出现。两组的并发症差别无统计学意义。结论:对于恶性梗阻性黄疸病人,PTBD 结合 TAI 和/或 TAE 是安全、有效的治疗方法。与单纯 PTBD 相比较,双介入法能改善病人的生活质量并提高生存率。它还可以提供更方便的途径来置放胆道金属内支架。

关键词:胆道肿瘤 恶性黄疸 经皮穿肝胆道引流术 经动脉化疗

Dual Interventional Treatment of Malignant Obstructive Jaundice: Combined Percutaneous Transhepatic Biliary Drainage and Transarterial Chemotherapy

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ABSTRACT: Objective: The purpose of this study was to evaluate the role of the combination of percutaneous transhepatic biliary drainage(PTBD) and the transarterial chemotherapy for the treatment of malignant obstructive jaundice. Materials and Methods: From 1987 June to 1996 June, total 82 cases of malignant obstructive jaundice were successfully treated by the combined method, of 28 cases were treated by PTBD alone(group A), and another 54 cases were received the transarterial infusion chemotherapy or/and chemoembolization about two weeks after the PTBD(group B). All patients were diagnosed to be advanced malignant tumor by multiple imagings, surgery as well as biopsy. All patients had been followed up. The efficacies of the two groups were compared. Results: After PTBD, serum bilirubin level in all patients were remarkably declined and liver function recovered within 15-20 days. In group A, mean survival period was 3.6 months, and no patient lived longer than 6 months without recanalization of biliary obstruction. In group B, mean survival period was 10.2 months with recanalization of biliary obstruction shown in 31 cases(57.4%) following 2-4 times of TAI and/or TAE. 9 of those cases were free of jaundice for 5-51 months after withdrawn of drainage

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catheter. No significant difference between the 2 groups in complications. Conclusion: PTBD combined with transarterial chemotherapy is a safe and effective method for the treatment of malignant obstructive jaundice. Comparing the efficiency of PTBD alone, it can improve patients' life quality and raise the survival rate. It may provide more easy approach to implant the biliary metal stent.

Key words: Biliary neoplasms Malignant obstructive Jaundice Percutaneous transhepatic biliary drainage Transarterial chemotherapy

Introduction

The malignant obstructive jaundice often occurred in the advanced stage of neoplasm is impossible to be cured surgically therefore. Since Molnar reported the relief of obstructive jaundice by percutaneous transhepatic catheterization and then percutaneous transhepatic biliary drainage (PTBD) and/or retained intrabiliary metal stent have been a primary measure of choice for palliative biliary decompression^[1]. Although PTBD and biliary endoprosthesis are responsible for definitive relief in the patients with malignant obstructive jaundice, but they can't control the growth of tumor being a major cause of death and recurrence of jaundice after insertion of biliary stent^[2-5]. To achieve both biliary decompression and tumor growth control, combination of PTBD and transarterial chemotherapy infusion and/or chemoembolization (TAI and/or TAE) were used to treat malignant obstructive jaundice in our department. We retrospectively reviewed our experience in 82 consecutive patients with malignant biliary obstruction undergone PTBD alone or in combination with TAI and/or TAE.

Materials and Methods

PTBD was successfully performed in 82 patients with advanced malignant obstructive jaundice from June 1987 to June 1996. The patients' age ranged from 28 to 83 years (mean 54.5 years). All cases including carcinoma of the pancreas (30.4%), ampullary carcinoma (3.6%), carci-

noma of the gallbladder (12.1%), cholangiocarcinoma (17%), portal lymph node metastases (26.8%), primary liver cancer (9.7%). The sites of obstruction located at the liver hilum, 54 cases; mid-lower common bile duct, 28 cases (table 1). 28 were treated by PTBD alone (group A) and another 54 cases (group B) with totally 115 times of TAI and/or TAE were performed about 2 weeks after PTBD.

PTBD was performed under local anesthesia with mild sedation and the majority received prophylactic antibiotics before-hand. The transhepatic approach from the right side was used in all patients. The instrumentation and technical principles were similar to Ferrucci described^[5]. In group B, TAI and/or TAE were performed 10~20 days after PTBD depending on the liver function recovery and serum bilirubin decreases. A 5 or 7F catheter was inserted percutaneously into the femoral artery with the tip in the celiac artery. Following celiac angiography, the patients were treated either with TAI or TAI and TAE. If tumor was hypovascular, the catheter ought to be further advanced into the feeding vessel of tumor, ended with TAI (n=41). Three anticancer agents were used including 5-fluorouridine (5-Fu) 1000mg/m², cis-platinum (CDDP) 80mg/m² and adriamycin (ADM) 50 mg/m². 13 patients with relatively hypervascular tumors received 3~10 ml Lipiodol mixed with ADM for embolization followed by infusion of 5-Fu and CDDP. Repeated TAI and/or TAE were performed at 1-or 2-month intervals and

most cases received 34 times of the treatments. Cholangiogram was performed through external drainage catheter after successful PTBD with one or two months interval. If obstructed biliary tract was recanalized, external drainage catheter could be withdrawn in some cases.

Complications related to the procedures were assessed and the survival rate with successful treatment were evaluated for both patients in the PTBD group and combination of PTBD and TAI and/or TAE group.

Table 1 Patients data, treatments and results

Diagnoses	Patients	PTBD	PTBD and TAI/TAE
Portal lymph Node metastases	22	10	12
Cholangiocarcinoma	14	6	8
Gallbladder carcinoma	10	2	8
Hepatoma	8	1	7
Ampullary carcinoma	3	1	2
Pancreatic carcinoma	25	8	17
Mean survival (month)		3.1	10.2
Recanalization		0	31(57.4%)

Results

After successful PTBD, serum bilirubin level in all patients were remarkably declined and liver functions recovered within 15 ~ 20 days in most cases. In group A, mean survival period was 3.6 months, and no patient lived longer than 6 months without any recanalization of the biliary obstruction. In group B, mean survival period was 10.2 months, and recanalization of biliary obstruction was shown in 31 cases following 2 ~ 4 times of TAI and/or TAE. 9 of those cases were free of jaundice for 5 ~ 51 months after drainage catheter withdrawn. There was no significant difference between groups in complications.

Discussion

PTBD and intrabiliary metal stent implant have already been considered as primary measure for nonoperative palliative biliary decompression.

And then tumor growth with recurrence jaundice becomes a major cause of death^{[6][7][8]}. Huibergts and colleagues reported 20% of the occlusion was caused by tumor ingrowth through the meshes of the stents^[9]. Covering the stent with a plastic sheath may prevent the occlusion by tumor ingrowth, but lasting only temporarily. To achieve both biliary decompression and tumor growth inhibition, we designed the dual interventional treatment, i. e., combination of PTBD and transarterial chemotherapy infusion and/or chemoembolization (TAI and/or TAE). Our experience in 82 consecutive patients with malignant biliary obstruction showed that PTBD combined with transarterial chemotherapy is a safe and effective method for the treatment of malignant obstructive jaundice, that would prolong patients' life period and improve life quality due to biliary obstruction recanalization after drainage catheter withdrawn.

It should be emphasized the recanalization of biliary obstruction in 9 cases of the dual interventional treatment group, including the TAI and/or TAE, can inhibit the tumor growth and also shrink the tumor size effectively. Therefore, implantation of metallic stents would be quite easy and further more resulted for prevention. We believe that should inhibit the tumor ingrowth through the mesh of the stent.

References

1. Molnar W, Stocknm AE. Relief of obstructive jaundice through percutaneous transhepatic catheter: A new therapeutic method. *AJR*, 1997, 122: 353.
2. LaBerge JM, Doherty M, Gordon RL, et al. Hilar malignancy: treatment with and expandable metallic transhepatic biliary stent. *Radiology*, 1990, 177: 793-797.
3. Rieber A, Brambs HJ. Metallic stents in malignant biliary

obstruction. *Cardiovasc Intervent Radiol*, 1997, 20: 43.

4. Iwasaki M, Furuse J, Yoshino M, et al. Percutaneous transhepatic biliary drainage for the treatment of obstructive jaundice caused by metastases from nonbiliary and non-pancreatic cancers. *Jpn J Clin Oncol*, 1996, 26: 465.

5. Ferrucci Jr, Mreller PR, Harbin WP. Percutaneous transhepatic biliary drainage. Technique, result and applications. *Radiology*, 1980, 135: 1-13.

6. Lammer J, Klein GE, Kleinert R, et al. Obstructive jaundice: use of expandable metal endoprosthesis for biliary drainage. *Radiology*, 1990, 177: 789-792.

7. Tsci CC, Mo LR, Lin RC, et al. Self-expandable metallic stents in the management of malignant biliary obstruction. *J Formos Med Assoc*, 1996, 95: 298-302.

8. Men S, Hekimoglu B, Kaderoglu H, et al. Palliation of malignant obstructive jaundice. Use of self-expandable metallic stents *Acta-Radiol*, 1996, 37: 259.

9. Hausegger KA, Kleinert R, Lammer J, et al. Malignant biliary obstructions: histologic findings after treatment with self-expandable stents. *Radiology*, 1992, 185: 461-464.

肺癌介入治疗及放射治疗后合并食管——支气管瘘 1 例

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食管 - 支气管瘘临床少见, 本院近期收治 1 例, 报告如下。

患者, 男, 69 岁。左中心型肺癌 9 个月, 先后 3 次介入治疗后 4 个月, “加速器”放射治疗后 1 个月, 呛咳 2 天於 9 个月前因咳嗽、痰中带血丝伴胸闷、左前胸痛(非劳累性), 消瘦而查胸片及胸部 CT 后经大医一院, 上海中山医院等多家医院确诊为左中心型肺癌, (7.0cm × 5.0cm)。先后三次行介入治疗 (BAI + BAE) 后, 咯血及胸闷症状消失, CT: 肿块缩小至 4.2cm × 4.0cm, 为进一步治疗行“加速器”放射治疗, 至放疗 25 次时(5 次/周, 总量至 4400rd) 出现咳嗽, 黄痰发烧伴胸闷气短、食欲不振、暂停放疗, 并静滴先锋必素, 地塞米松等治疗 8 天。症状消失而停药, 并继续放疗 5 次(总量至 5250rd) 时、再次出现咳嗽、胸闷、发烧、乏力等症, 胸片、CT 示左肺癌 3.8cm × 3.7cm, 伴炎性改变。诊断放射性肺炎。再次静滴先锋必素 3.0g/d, 地塞米松 10mg/d, 并支持、对症治疗。症状渐轻, 持续 1 小时后缓解。此后

进食即呛咳, 尤以流食为著, 咯出大量含食物之痰液, 有时咯出黄绿色稀痰, 自觉味苦, 酸而入院。既往慢支 10 余年, 近 2 年反复咳嗽且痰中带血丝 2 次, 每次抗炎治疗后症状消失, 未经系统检查。无肺结核史。查体: T: 37℃, P: 82 次/分, 呼吸 28 次/分, 血压: 14/9kPa, 恶性消耗性体质, 扶入病房, 神志清, 气管居中, 颈静脉无怒张, 桶状胸, 左肺叩浊音, 左肺中下野呼吸音减弱, 并可闻及湿性罗音及痰鸣音, 右肺呼吸音粗糙。心脏叩听(一), 腹部(一)。X 线检查: 先后吞服 76% 泛影葡胺 15ml、10ml 透视及点片示: 大部分造影剂顺利入胃内, 部分於食管胸段平第 7 胸椎处向左侧外溢, 瘘道显示清楚, 左下支气管分支显影, 其密度与胃内造影剂密度一致。诊断: 食管 - 支气管瘘。胃镜下见: 距门齿 27 ~ 31cm 处 4cm 长椭圆形瘘口。胃镜结合透视下置入国产带膜记忆合金金属内支架后呛咳症状消失。3 天后复查透视见内支架展开, 位置良好, 服 76% 泛影葡胺顺利入胃内。点片未见外溢, 支气管无显影。

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