

doi:10.3969/j.issn.1005-0264.2019.01.013

肝硬化门静脉高压自发性脾肾分流患者临床特征分析

易在凤¹ 吴凡² 郑莉^{1△}

1 湖北省中西医结合医院老年病科 (湖北 武汉, 430015) 2 华中科技大学同济医学院附属武汉中心医院消化内科

摘要 目的:分析肝硬化门静脉高压合并自发性脾肾分流患者临床特征。方法:回顾性分析我院 17 例肝硬化门静脉高压合并脾肾分流患者作为分流组,记录其 Child-Pugh 评分,门静脉内径、脾静脉内径,总胆红素水平及有无食管胃底静脉曲张、肝性脑病及腹水的发生;随机抽取同期住院 20 例肝硬化门静脉高压未合并脾肾分流患者作为对照组,分析其临床特征。结果:分流组患者门静脉及脾静脉内径分别为 (14.14 ± 0.93) mm、 (15.82 ± 1.03) mm,对照组患者分别为 (15.35 ± 1.22) mm、 (12.56 ± 1.90) mm,两组相比较差异均有统计学意义($P < 0.05$);脾肾分流患者总胆红素水平为 (32.94 ± 7.56) $\mu\text{mol/L}$,总胆红素异常率为 88.23%,对照组分别为 (37.45 ± 22.61) $\mu\text{mol/L}$ 和 55.00%,两组总胆红素水平相比无统计学意义($P > 0.05$)。分流组患者总胆红素异常率高于对照组($P < 0.05$);分流组食管胃底静脉曲张、肝性脑病、腹水发生率分别为 88.24%、47.06%、23.53%,对照组分别为 55.00%、10.00%、30.00%,两组相比较,食管胃底静脉曲张及肝性脑病发生率有统计学意义($P < 0.05$),腹水发生率相比无统计学意义($P > 0.05$)。结论:肝硬化门静脉高压合并脾肾分流患者存在不同程度的总胆红素升高,多合并食管胃底静脉曲张,其肝性脑病的发生率明显升高。

关键词 肝硬化;脾肾分流;临床特征

Analysis of clinical characteristics on patients with liver cirrhosis with portal hypertension accompanied by splenorenal shunt

YI Zai-feng¹, WU Fan², ZHENG Li^{1△}. 1. Department of Geriatrics, Hubei Provincial Hospital of Integrated Traditional Chinese and Western Medicine (Wuhan Hubei, 430015) China

Abstract Objective: To analyze the clinical characteristics of patients with liver cirrhosis with portal hypertension accompanied by splenorenal shunt. **Methods:** A total of 17 patients with liver cirrhosis with portal hypertension accompanied by splenorenal shunt were analyzed as a shunt group. Child-Pugh score, portal vein diameter, splenic vein diameter, total bilirubin level, the occurrences of esophageal varices, hepatic encephalopathy and ascites were recorded. A total of 20 patients with liver cirrhosis with portal hypertension unaccompanied by splenorenal shunt were randomly divided into the control group, and their abovementioned clinical characteristics were recorded. **Results:** The levels of portal vein diameter and splenic vein diameter of shunt group were respectively (14.14 ± 0.93) mm, (15.82 ± 1.03) mm, those of the control group were respectively (15.35 ± 1.22) mm; (12.56 ± 1.90) mm, the differences were statically significant ($P < 0.05$). In shunt group, the total bilirubin level was (32.94 ± 7.56) $\mu\text{mol/L}$, abnormal rate of the total bilirubin was 88.23%; the total bilirubin level of the control group was (37.45 ± 22.61) $\mu\text{mol/L}$, abnormal rate of the total bilirubin was 55.00%. There was no significant difference in the total bilirubin levels between the two groups ($P > 0.05$). The abnormal rate of total bilirubin in the shunt group was higher than that in the control group ($P < 0.05$). the occurrences of esophageal varices, hepatic encephalopathy and ascites of shunt group were respectively 88.24%, 47.06%, 23.53%, the occurrences of esophageal varices, hepatic encephalopathy and ascites were respectively 55.00%, 10.00%, 30.00% in the control group, the incidence of esophageal varices and hepatic encephalopathy were statistically significant ($P < 0.05$), the incidence of ascites was not statistically significant between the two groups ($P > 0.05$). **Conclusion:** Most of the shunt group patients have elevated total bilirubin, the shunt group patients are mostly complicated with esophageal varices. the incidence of hepatic encephalopathy is significantly increased.

Key Words liver cirrhosis; splenorenal shunt; clinical characteristics

△通讯作者

肝硬化患者多合并门静脉高压,门静脉高压常常并发食管胃底静脉曲张、腹水、肝性脑病、自发性腹膜炎等并发症,上述并发症对患者的预后产生明显的影响^[1]。脾肾分流是门静脉高压的另外一种表现形式,我们发现部分肝硬化门静脉高压患者存在脾肾分流现象,这些患者有着怎样的临床特征尚不清楚^[2]。本文对该类患者的临床特征进行分析,以便指导临床。

1 资料与方法

1.1 一般资料 收集我院 2016 年 1 月~2016 年 12 月肝硬化住院患者,肝硬化诊断标准符合 2000 年《病毒性肝炎防治方案》^[3]。腹部增强 CT 检查发现脾肾分流患者 17 例作为分流组。随机抽取同期住院肝硬化门静脉高压无脾肾分流患者 20 例,作为对照组。

1.2 观察指标 每例患者入院完善血常规、肝肾功能、凝血功能、胃镜及腹部 CT 增强等检查,记录每例患者肝硬化原因、Child-Pugh 评分、总胆红素水平,根据腹部 CT 增强影像图片,利用 CT 阅片系统测量门静脉内径及脾静脉内径,记录有无食管胃底静脉曲张的发生(胃镜检查),有无肝性脑病及腹水发生。

1.3 统计学方法 应用统计学软件 SPSS 17.0,计量资料用均数 \pm 标准差($\bar{x} \pm s$)表示,以 t 检验和 χ^2 检验进行统计学分析。 $P < 0.05$ 为差异具有统计学意义。

2 结果

2.1 两组患者基本情况 分流组患者 17 例,其中男 11 例,女 6 例;HBV 相关肝硬化 7 例,HCV 相关肝硬化 5 例,原发性胆汁性肝硬化 1 例,不明原因肝硬化 4 例;Child A 级 4 例,Child B 级 11 例,Child C 级 2 例。对照组患者 20 例,其中男 14 例,女 6 例;HBV 相关肝硬化 13 例,HCV 相关肝硬化 5 例,原发性胆汁性肝硬化 1 例,不明原因肝硬化 1 例;Child A 级 3 例,Child B 级 13 例,Child C 级 4 例。

2.2 两组患者门静脉及脾静脉内径情况 从腹部 CT 增强可以看出,脾肾分流患者门静脉直径变细,部分血液经过脾肾分流道进入体循环,脾静脉内径增宽,见插图图 1。分流组患者门静脉及脾静脉内径分别为 (14.14 ± 0.93) mm, (15.82 ± 1.03) mm,对照组患者门静脉及脾静脉内径分别为 (15.35 ± 1.22) mm; (12.56 ± 1.90) mm,两组相比差异较均有统计学意义($P < 0.05$)。

2.3 两组患者总胆红素水平改变情况 脾肾分流患者总胆红素水平为 (32.94 ± 7.56) μ mol/L,对照组总胆红素水平为 (37.45 ± 22.61) μ mol/L,两组比较差异无统计学差异($P > 0.05$);分流组总胆红素正常 2 例,异常 15 例,异常率为 88.23%;对照组总胆红素异常率为 55.00%,两组比较差异具有统计学意义($P < 0.05$)。

2.4 两组患者肝硬化相关并发症发生率 分流组食管胃底静脉曲张、肝性脑病、腹水发生率分别为 88.24%、47.06%、23.53%,对照组食管胃底静脉曲张、肝性脑病、腹水发生率分别为 55.00%、10.00%、30.00%,两组相比较,食管胃底静脉曲张及肝性脑病发生率的差异具有统计学意义($P < 0.05$),腹水发

生率相比差异无统计学意义($P > 0.05$)。

3 讨论

门静脉高压是肝硬化不断进展后必然出现的一个临床综合征,门静脉高压基本病理生理特征是门静脉系统血流受阻和(或)血流量增加,门静脉及其属支血管内压力升高伴随侧支循环形成^[4],这些侧支循环一方面可以缓解门静脉压力,另一方面也会给患者带来相应的并发症。本研究发现,肝硬化门静脉高压合并脾肾分流患者多存在不同程度的黄疸,食管胃底静脉曲张及肝性脑病发生率明显升高。

肝硬化门静脉高压常见的门体通路有食管胃底静脉曲张、腹壁静脉曲张以及直肠下端静脉曲张等,发生于食管胃底以外的静脉曲张统称为异位静脉曲张,上述部位的静脉曲张破裂出血,常常导致患者死亡。对于某一个患者来说,曲张常常不是发生在单一部位。日本一项研究表明^[5],异位静脉曲张最常见于直肠,占 44.5%,这些直肠异位静脉曲张患者 94.8% 既往有食管静脉曲张破裂出血病史。脾肾分流是门静脉高压形成后机体自行减压的另外一种形式,自发性脾肾分流的直接征象是脾静脉和肾静脉之间有交通支开放。潘卫东等^[6]对 217 例肝硬化门静脉高压患者统计发现,脾肾分流发生率为 19.35%,脾肾分流可以有效的降低门静脉高压胃病的发生率并缓解其严重程度,建议在脾脏切除时注意保护自发性脾肾分流道。本文 17 例脾肾分流患者中合并食管胃底静脉曲张者 15 例,脾肾分流有别于小肠结肠等部位的静脉曲张,小肠结肠等部位的静脉曲张常常可以发生致死性的出血,而脾肾分流一般不会直接带来出血风险,相反可以真正起到降低门静脉压力的作用。

脾肾分流可以降低门静脉压力,但同时也带来新的临床问题。脾肾分流后,一方面肝脏的血流量减少,导致肝脏缺血,肝功能进一步减退。本文肝硬化合并脾肾分流患者胆红素异常率为 88.23%,可能与脾肾分流后肝脏缺血有关;另一方面部分血液未经过肝脏解毒直接进入血液循环,导致肝性脑病的发生率增加。有研究提示^[7],对于高氨血症相关的脑病患者,需要警惕有无脾肾分流存在。本文 47.06% 的脾肾分流患者曾发生肝性脑病,23.53% 的患者发生腹水,表明脾肾分流在降低门静脉压力的同时,肝性脑病发生率也随之增加,但可降低腹水的发生。

脾肾分流是肝硬化门静脉高压门体分流存在的一种少见形式,脾肾分流可以起到降低门静脉压力的作用,减少腹水的发生,但可导致肝性脑病发生率的增加,更有小样本研究发现存在脾肾分流的肝硬化患者发生肝癌的比例增高,原因尚不明确^[8]。由于缺乏有效的肝硬化门静脉高压动物模型,有关门静脉高压相关的并发症对病程的影响也未能在动物中进一步研究^[9]。脾肾分流对患者来说各有利弊,我们分析发现患者从脾肾分流中受益的程度取决于分流道的大小。不足以引起肝性脑病及肝功能受损的脾肾分流可以有效的降低门静脉压力,对患者利大于弊;反之,患者从脾肾分流中获益较少,需要对脾肾

(下转第 43 页)

- [9] Kishore S, Friedman T, Madoff D C. Update on Embolization Therapies for Hepatocellular Carcinoma[J]. *Curr Oncol Rep*, 2017, 19(6): 40.
- [10] 赵倩, 颜志平. 载药微球经导管动脉化疗栓塞治疗肝癌研究进展[J]. *介入放射学杂志*, 2017, 26(11): 1052 – 1056.
- [11] 陈刚, 张鼎, 应亚草, 等. 国产载药微球经动脉化疗栓塞治疗不可切除原发性肝癌的临床研究[J]. *浙江大学学报(医学版)*, 2017, 46(2): 44 – 51.
- [12] 徐彦哲, 丁佑铭, 杨阳, 等. 微球联合碘化油栓塞化疗治疗肝细胞癌的 Meta 分析[J]. *中华肝胆外科杂志*, 2014, 20(1): 24 – 28.
- [13] Facciorusso A, Di Maso M, Muscatiello N. Drug-eluting beads versus conventional chemoembolization for the treatment of unresectable hepatocellular carcinoma: A meta-analysis[J]. *Dig Liver Dis*, 2016, 48(6): 571 – 577.
- [14] Malagari K, Pomoni M, Moschouris H, *et al*. Chemoembolization of hepatocellular carcinoma with HepaSphere 30-60 μ m. Safety and efficacy study[J]. *Cardiovascular & Interventional Radiology*, 2014, 37(1): 165 – 175.
- [15] Megías Vericat J E, García M R, López B E, *et al*. Trans-arterial chemoembolization with doxorubicin-eluting particles versus conventional trans-arterial chemoembolization in unresectable hepatocellular carcinoma: A study of effectiveness, safety and costs[J]. *Radiología*, 2015, 57(6): 496 – 504.
- [16] Malagari K, Pomoni M, Spyridopoulos T N, *et al*. Safety Profile of Sequential Transcatheter Chemoembolization with DC Bead: Results of 237 Hepatocellular Carcinoma (HCC) Patients[J]. *Cardiovasc Intervent Radiol*, 2011, 34(4): 774 – 785.
- [17] Burrell M, Reig M, Forner A, *et al*. Survival of patients with hepatocellular carcinoma treated by transarterial chemoembolisation (TACE) using Drug Eluting Beads. Implications for clinical practice and trial design[J]. *J Hepatol*, 2012, 56(6): 1330 – 1335.
- [18] 姜松, 李桂杰, 周祝谦, 等. CalliSpheres 载药栓塞微球治疗中晚期肝癌临床效果评价[J]. *中华介入放射学电子杂志*, 2017, 5(3): 174 – 178.
- [19] Sattler T, Bredt C, Surwald S, *et al*. Efficacy and Safety of Drug Eluting Bead TACE with Microspheres < 150 μ m for the Treatment of Hepatocellular Carcinoma[J]. *Anticancer Res*, 2018, 38(2): 1025.
- [20] Padia SA, Shivaram G, Bastawrous S, *et al*. Safety and efficacy of drug-eluting bead chemoembolization for hepatocellular carcinoma: comparison of small-versus medium-size particles[J]. *J Vasc Interv Radiol*, 2013, 24(3): 301 – 306.
- [21] Recchia F, Passalacqua G, Filauri P, *et al*. Chemoembolization of unresectable hepatocellular carcinoma: Decreased toxicity with slow-release doxorubicin-eluting beads compared with lipiodol[J]. *Oncol Rep*, 2012, 27(5): 1377 – 1383.
- [22] Vogl TJ, Lammer J, Lencioni R, *et al*. Liver, gastrointestinal, and cardiac toxicity in intermediate hepatocellular carcinoma treated with PRECISION TACE with drug-eluting beads: results from the PRECISION V randomized trial[J]. *Am J Roentgenol*, 2011, 197(4): 562 – 570.

(修回日期: 2018 – 11 – 23 编辑: 韦 怡)

(上接第 39 页)

分流进行积极处理,对于脾肾分流血管内径达到多少需要处理,尚缺乏相关的临床证据,需要进一步研究。

参考文献

- [1] 张俊勇, 蒯景华, 贾继东, 等. 肝硬化门静脉高压并发症对预后的影响[J]. *中华肝脏病杂志*, 2009, 17(4): 263 – 265.
- [2] Tarantino G, Citro V, Conca P, *et al*. What are the implications of the spontaneous spleno-renal shunts in liver cirrhosis[J]. *BMC Gastroenterol*, 2009, 9: 89.
- [3] 中华医学会传染病与寄生虫病学分会、肝病学分会. 病毒性肝炎防治方案[J]. *中华肝脏病杂志*. 2000, 8(6): 324 – 329.
- [4] 中华医学会肝病学分会, 中华医学会消化病学分会, 中华医学会内镜学分会. 肝硬化门静脉高压食管胃静脉曲张出血的防治指南[J]. *中国肝脏病杂志(电子版)*, 2016, 8(1): 1 – 18.
- [5] Watanabe N, Toyonaga A, Kojima S, *et al*. Current status of ectopic varices in Japan: Results of a survey by the Japan Society for Portal Hypertension[J]. *Hepatol Res*, 2010, 40(8): 763 – 776.
- [6] 潘卫东, 许瑞云, 郑丰平, 等. 自发生脾肾分流对门静脉高压性胃病的影响[J]. *中国内镜杂志*, 2005, 11(5): 481 – 483.
- [7] Rogal SS, Hu A, Bandi R, *et al*. Novel therapy for non-cirrhotic hyperammonemia due to a spontaneous splenorenal shunt[J]. *World J Gastroenterol*, 2014, 20(25): 8288 – 8291.
- [8] Wu W, He C, Han G. Embolization of spontaneous splenorenal shunt for after-TIPS hepatic encephalopathy in a patient with cirrhosis and variceal bleeding[J]. *Hepatology*, 2015, 61(5): 1761 – 1762.
- [9] 王瑶, 杨帆. 肝硬化门静脉高压动物模型研究进展[J]. *中西医结合肝病杂志*, 2016, 26(3): 188 – 190.

(修回日期: 2018 – 10 – 16 编辑: 高 翔)