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曲美他嗪或生脉饮联合黄芪注射液治疗急性病毒性心肌炎的临床对比分析 *

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摘要 目的：探讨曲美他嗪或生脉饮分别与黄芪注射液联用治疗急性病毒性心肌炎（AVMC）的临床疗效。**方法**：选取 2013 年 4 月~2016 年 4 月我院收治的 AVMC 患者 140 例，按随机数字表法分为对照组（n=45）、曲黄组（n=46）及生黄组（n=49）。对照组患者给予常规药物治疗，曲黄组在对照组的基础上给予曲美他嗪联合黄芪注射液治疗，生黄组在对照组的基础上给予生脉饮联合黄芪注射液治疗。比较三组患者中血清肌酸磷酸激酶同工酶（CK-MB）、心肌钙蛋白 I（cTnI）水平、心电图指标、临床总有效率、临床症状改善及不良反应情况。**结果**：治疗后，曲黄组和生黄组总有效率均显高于对照组，曲黄组总有效率高于生黄组（P<0.05）。曲黄组和生黄组患者的心悸和胸痛发生率低于对照组，差异具有统计学意义（P<0.05）。曲黄组和生黄组患者血清 CK-MB、cTnI 水平低于对照组，且曲黄组低于生黄组（P<0.05）。曲黄组患者房室传导阻滞、ST-T 变化、室性期前收缩发生率低于对照组（P<0.05）。三组患者不良反应发生率比较无统计学差异（P>0.05）。**结论**：曲美他嗪联合黄芪注射液治疗 AVCM 的总有效率高于生脉饮联合黄芪注射液治疗，降低心肌损伤程度，改善临床症状，无严重不良反应，值得临床推广应用。

关键词：病毒性心肌炎；急性；黄芪注射液；曲美他嗪；生脉饮；疗效

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Acute Viral Myocarditis：Clinical Comparative Analysis of Trimetazidine or Shengmai Decoction Combined with Astragalus Injection*

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ABSTRACT Objective: To explore the clinical curative effect of trimetazidine or Shengmai decoction combined with astragalus injection in the treatment of acute viral myocarditis (AVMC). **Methods:** A total of 140 patients with AVMC, who were treated in Sichuan Provincial People's Hospital from April 2013 to April 2016, were selected and randomly divided into control group (n=45), Qu Huang group (n=46) and Sheng Huang group (n=49). The control group received routine drug treatment.On the basis of the control group's therapy, the Qu Huang group received trimetazidine combined with astragalus injection and the Sheng Huang group received Shengmai decoction combined with astragalus injection. The serum creatine kinase-MB (CK-MB), cardiac troponin I (cTnI), electrocardiogram indexs, clinical total effective rate, improvement of clinical symptoms and adverse reaction were compared among the three groups. **Results:** After treatment, the total effective rate in the Qu Huang group and Sheng Huang group was significantly higher than that in the control group,and the total effective rate in the Qu Huang group was higher than that in the Sheng Huang group (P<0.05). The incidence of heart palpitations and chest pain in the Qu Huang group and the Sheng Huang group were lower than that in the control group,the differences were statistically significant (P<0.05). The levels of serum CK-MB and cTnI in the Qu Huang group and the Sheng Huang group were lower than those in the control group, and the levels of above indexes in the Qu Huang group was lower than that in the Sheng Huang group (P<0.05). The incidence of atrioventricular heart-block, ST-T change,premature ventricular contractions in the Qu Huang group were lower than those in the control group (P<0.05).There was no significant difference in the incidence of adverse reactions among the three groups (P>0.05). **Conclusion:** In the treatment of patients with AVCM. The total effective rate of trimetazidine combined with astragalus injection is higher than that of Shengmai decoction combined with astragalus injection. It can reduce the degree of myocardial injury and improve clinical symptoms,without serious adverse reactions, which is worthy of clinical application.

Key words: Viral myocarditis; Acute; Astragalus injection; Trimetazidine; Shengmai decoction; Curative effect

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前言

病毒性心肌炎（viral myocarditis，VMC）是一种急性病毒性感染引起的心肌局限性或弥漫性病变，且易演变成扩张型心肌

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病或心力衰竭[1-3]。VMC 可按照病程分为急性、亚急性或慢性等。急性病毒性心肌炎(acute viral myocarditis,AVMC)是一种具有发热、肌肉酸、咽痛、心悸、胸闷等类流感样症状的局限性或弥漫性心肌炎性病变,主要由流感病毒、腮腺病毒及柯萨奇 B 组病毒感染引起[4-5]。严重的 AVMC 者由于心肌损伤导致心力衰竭、心律失常,甚至休克或猝死,对患者的身心和精神健康造成了严重的危害[6]。近年来,由于生存环境恶化及生活压力加大,AVMC 发病率呈上升趋势,且发病年龄正趋于年轻化[7-9]。目前 AVMC 的治疗多以药物为主,而采用中药治疗或中西医结合治疗 AVMC 逐渐显示了独特的优势。曲美他嗪是一种哌嗪类衍生物,具有保护机体在缺血或缺氧状况下的能量代谢,稳定细胞内的作用;生脉饮可以保护心功能,改善心肌代谢,增强免疫功能;黄芪注射液可以益气养元,养心通脉,提早恢复受抑制心肌的功能,改善微循环[10,11]。因此,本文通过探讨曲美他嗪或生脉饮联合黄芪注射液治疗 AVMC 的对比分析,旨在为临床治疗急性病毒性心肌炎提供参考。

1 资料与方法

1.1 一般资料

回顾性分析 2013 年 4 月 ~2016 年 4 月我院收治的 140 例 AVMC 患者的临床资料,纳入标准:(1)符合 1999 年全国心肌炎心肌病学专题座谈会制定的成人 AVMC 的诊断标准[12];(2)经心电图机检查、超声心动图检查、心肌酶学、胸部 X 线确诊的患者;(3)伴有不同程度的心悸、乏力、呼吸困难、胸闷、胸痛者;(4)患者或家属知情同意并签署知情同意书。排除标准:(1)合并严重肺、肝、肾等重要脏器疾病者;(2)妊娠、哺乳期及甲状腺功能亢进者;(3)脑血管疾病、造血系统疾病者;(4)对研究药物过敏者。按照随机数字表法分为对照组(n=45)、曲黄组(n=46)及生黄组(n=49)。其中对照组男 24 例,女 21 例,年龄 17~65 岁,平均年龄(34.26± 2.55)岁;NYHA 心功能分级:Ⅰ级 16 例,Ⅱ级 18 级,Ⅲ级 11 例。曲黄组男 26 例,女 20 例,年龄 19~63 岁,平均年龄(36.14± 2.23)岁;NYHA 心功能分级:Ⅰ级 15 例,Ⅱ级 21 级,Ⅲ级 10 例。生黄组男 27 例,女 22 例,年龄 20~66 岁,平均年龄(34.46± 3.91)岁;NYHA 心功能分级:Ⅰ级 17 例,Ⅱ级 19 级,Ⅲ级 13 例。三组患者一般资料比较无统计学差异(P>0.05),可进行组间比较。本研究经过我院医学伦理学委员会批准。

1.2 治疗方法

对照组患者给予常规药物治疗:抗病毒、三磷酸腺苷、维生素 C 片、辅酶 A 药等,并发心律失常患者依据类型可选用倍他乐克、普罗帕酮片等;另心衰患者加服利尿剂、洋地黄或依那普利等。曲黄组患者在对照组的基础上给予曲美他嗪联合黄芪注射液进行治疗,曲美他嗪(南京正科医药股份有限公司,国药准字:H20083803,规格:20 mg)口服,3 次 /d,20 mg/ 次;黄芪注射液(神威药业集团有限公司,国药准字:Z13021000,规格:20 mL/ 支)静脉滴注黄芪注射液 20 mL+5%葡萄糖注射液 250 mL,1 次 /d。生黄组患者在对照组的基础上给予生脉饮联合黄芪注射液治疗,生脉饮(北京同仁堂科技发展股份有限公司制药厂,国药准字:Z11020363,规格:10 mL/ 支)口服,3 次 /d,10 mL/ 次;静脉滴注黄芪注射液 20mL+5%葡萄糖注射液 250mL,1 次 /d。以上三组均持续治疗 2 周。

1.3 观察指标

观察三组患者心悸、乏力、胸闷、胸痛等症状改善情况、临床总有效率及不良反应,采用酶联免疫吸附试验(enzyme linked immunosorbent assay,ELISA)检测患者血清中心肌钙蛋白 I(cardiac troponin I,cTnI)水平,采用脂糖凝胶电泳法测定肌酸磷酸激酶同工酶(creatine kinase-MB,CK-MB)水平,分析比较三组患者动态心电图指标(房室传导阻滞、ST-T 变化、室性期前收缩、心律失常等)。

1.4 临床疗效判定标准[13]

判定标准:治愈:无相应临床症状,CK-MB、cTnI 水平和房室传导阻滞、ST-T 变化、室性期前收缩、心律失常恢复至正常参考值;显效:临床症状基本消失,CK-MB、cTnI 水平和房室传导阻滞、ST-T 变化、室性期前收缩、心律失常基本恢复至正常参考值;有效:临床症状有所改善,CK-MB、cTnI 水平和房室传导阻滞、ST-T 变化、室性期前收缩有一定改善;无效:临床症状、CK-MB、cTnI 水平和房室传导阻滞、ST-T 变化、室性期前收缩、心律失常均无改善甚至加重。总有效率 = 治愈率、显效率、有效率之和。

1.5 统计学方法

采用 SPSS19.0 进行统计分析,临床疗效、心电图指标、不良反应发生率等计数资料采用率(%)表示,进行 x^2 检验,cTnI 水平等计量资料采用($\bar{x}\pm s$)表示,进行 t 检验,以 α=0.05 为检验标准。

2 结果

2.1 三组患者临床疗效比较

曲黄组总有效率为 91.30%,高于生黄组的 85.71%,且两组均高于对照组,差异具有统计学意义(P<0.05),结果见表 1。

2.2 三组患者临床症状改善情况比较

治疗前,三组患者心悸、胸闷、胸痛及乏力的发生率比较差异无统计学意义(P>0.05);治疗后,曲黄组和生黄组患者的心悸、胸闷、胸痛及乏力的发生率低于对照组,且曲黄组患者的心悸和胸痛的发生率低于生黄组,差异具有统计学意义(P<0.05),结果见表 2。

表 1 三组患者临床疗效比较[n(%)]

Table 1 Comparison of clinical efficacy among three groups[n(%)]

Groups	n	Cure	Markedly effective	Effective	Invalid	Total effective rate
Control group	45	5(11.11)	14(31.11)	11(24.44)	15(33.33)	30(66.67)
Qu Huang group	46	11(23.91)	21(45.65)	10(21.74)	4(8.70)	42(91.30)^{ab}
Sheng Huang group	49	8(16.33)	18(36.73)	16(32.65)	7(14.29)	42(85.71)^{a}

Note: Compared with control group,^{a}P<0.05; Compared with Sheng Huang group, ^{b}P<0.05.

表 2 三组患者临床症状改善情况比较[n(%)]

Table 2 Comparison of clinical symptom improvement among three groups[n(%)]

Groups	n	Palpitation		Chest tightness		Chest pain		Fatigue	
		Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment
Control group	45	42(93.33)	13(28.89)	44(97.78)	15(33.33)	44(97.78)	15(33.33)	41(91.11)	14(31.11)
Qu Huang group	46	43(93.48)	5(10.87)[ab]	45(97.83)	8(17.39)[a]	44(95.65)	6(13.04)[ab]	42(91.30)	9(19.57)[a]
Sheng Huang group	49	46(93.88)	6(12.24)[a]	47(95.92)	7(14.29)[a]	46(93.88)	7(14.29)[a]	45(91.84)	8(16.33)[a]

Note: Compared with control group, [a]P<0.05; Compared with Sheng Huang group, [b]P<0.05.

2.3 三组患者心肌损伤程度比较

治疗后，曲黄组和生黄组患者中血清 CK-MB、cTnI 水平较对照组降低，差异有统计学意义（P<0.05）；曲黄组患者中血清 CK-MB、cTnI 水平低于生黄组，差异具有统计学意义（P<0.05），结果见表 3。

表 3 三组患者心肌损伤程度比较（$\bar{x}\pm s$）

Table 3 Comparison of myocardial injury among three groups ($\bar{x}\pm s$)

Groups	n	CK-MB(U/L)	cTnI(μg/L)
Control group	45	27.12± 3.65	0.69± 0.08
Qu Huang group	46	14.33± 2.12[ab]	0.13± 0.02[ab]
Sheng Huang group	49	16.87± 2.87[a]	0.20± 0.04[a]

Note: Compared with control group, [a]P<0.05; Compared with Sheng Huang group, [b]P<0.05.

2.4 治疗后患者心电图指标变化分析

治疗后，曲黄组患者房室传导阻滞、ST-T 变化、室性期前收缩发生率均较对照组降低（P<0.05）；生黄组患者房室传导阻滞、ST-T 变化、室性期前收缩及心律失常率低于对照组，但差异无统计学意义（P>0.05）；曲黄组和生黄组患者上述四种心电图指标比较，差异均无统计学意义（P>0.05），结果见表 4。

表 4 三组患者心电图指标比较[n(%)]

Table 4 Comparison of electrocardiogram indexes among three groups[n(%)]

Groups	n	Atrioventricular heart-block	ST-T change	Premature ventricular contractions	Arrhythmia
Control group	45	12(26.67)	11(24.44)	11(24.44)	7(15.56)
Qu Huang group	46	4(8.70)[a]	4(8.70)[a]	4(8.70)[a]	3(6.52)
Sheng Huang group	49	7(14.29)	6(12.24)	6(12.24)	4(8.16)

Note: Compared with control group, [a]P<0.05.

2.5 三组患者不良反应情况比较

治疗和观察期间，对照组患者 2 例出现腹部不适，1 例出现恶心、呕吐，不良反应发生率为 6.67%(3/45)；曲黄组患者 2 例出现腹部不适，1 例出现恶心、呕吐，1 例出现食欲不振，1 例出现头痛，不良反应发生率为 10.87%(5/46)；生黄组患者 1 例出现腹部不适，2 例出现食欲不振，1 例出现恶心、呕吐，不良反应发生率为 8.16%(4/49)。三组患者不良反应发生率比较无统计学差异（P>0.05）。

3 讨论

由于 AVMC 发病机制复杂，目前对于该病的诊治，尚缺乏有效的控制措施，其临床治疗多以药物对症及支持治疗为主。以往西医治疗 AVMC 主要以抗病毒、保护心肌、抗心律失常等为主，采用抗病毒和调节免疫相结合的疗法，但有效性和特异性存在一定的治疗缺陷，治愈率较低，且药物副作用大[14-16]。有相关研究表明，采用中药联合疗法对提高 AVMC 临床疗效和控制病情取得了较好的效果[17]。本研究表明，采用中药联合（曲美他嗪 + 黄芩注射液、生脉饮 + 黄芩注射液）治疗 AVMC 比常规治疗在临床疗效，症状改善（心悸、胸闷、胸痛等），实心电图指标改善方面均有明显优势。现代药理研究表明，黄芪可以提高患者免疫力，同时还具有抗病毒的作用，黄芪注射液能保护心肌细胞，减少或清除氧自由基，能够控制 AVMC 病情，改善患者的健康状况[18,19]。曲美他嗪具有稳定心肌细胞膜，保护心肌细胞，减轻心肌细胞内酸中毒，改善左心室收缩功能的作用[20,21]。刘帅等[22]研究也发现，黄芪注射液联合曲美他嗪治疗 AVMC 的疗效和安全性高。生脉饮由人参（党参）、麦冬和五味子组成，具有养心生津、补肺气、疏通血脉的功效。生脉饮和黄芪注射液联用，以补气养阴、养心生津，并能祛除表邪，从而达到标本兼治之功。叶艳芳等研究表明，黄芪注射液联合生脉饮治疗 AVMC 较西医常规治疗在患者的临床症状及心肌酶谱的变化上改善明显[23,24]。

本研究结果显示，在治疗 AVMC 临床疗效和临床症状改善情况，曲黄组和生黄组均优于对照组，且曲黄组优于生黄组，提示曲美他嗪联合黄芪注射液治疗 AVMC 临床疗效优于生脉

饮联合黄芪注射液，分析原因为两者有具有协同增效的作用，曲美他嗪能更快的发挥药效、控制病情，提高中药黄芪注射液的疗效。曲黄组和生黄组对 AVMC 患者的心悸和胸痛临床症状的改善更为明显，且均优于对照组患者；两组中血清 CK-MB、cTnI 水平明显低于对照组，且曲黄组患者中血清 CK-MB、cTnI 水平降低更为明显，提示曲美他嗪联合黄芪注射液能够有效减轻 AVMC 患者的心肌损伤程度，分析原因为 AVMC 患者心肌细胞内酸中毒及自由基损害较严重，曲美他嗪能减轻这种不利的变化，从而可以保持心肌细胞膜的稳定，以达到保护心肌细胞的作用，黄芪注射液则能够扩张血管平滑肌，减少或清除体内多余的氧自由基，改善了心肌细胞内的微循环，同样可以对心肌细胞进行保护[25-27]。曲黄组患者房室传导阻滞、ST-T 变化、室性期前收缩发生率均较对照组降低，提示黄芪注射液与曲美他嗪联合应用具有效果间的相互促进作用，其能改善患者的抗心肌缺血症状以及对心肌起到保护作用，分析原因为黄芪注射液能调节心律，而曲美他嗪则在心肌细胞能量代谢、左心室收缩功能等方面具有改善效果，两者的联合使用在 AVMC 患者治疗中具有重要的意义[28,29]。生黄组患者不良反应发生率较曲黄组患者降低，但三组患者不良反应发生率组间相互比较，差异均无统计学差异（P>0.05）。这一研究结果与相关文献报道相似[30]。

综上所述，曲美他嗪联合黄芪注射液治疗 AVMC 的临床疗效和临床症状改善情况较好，改善患者心肌损伤，调节心律，安全性较好，值得临床推广。

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