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芪苈强心胶囊联合比索洛尔对老年心力衰竭患者的疗效

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摘要 目的:研究芪苈强心胶囊联合比索洛尔对老年心力衰竭患者的临床疗效。**方法:**选择 2015 年 6 月~2016 年 6 月在我院进行诊治的老年心力衰竭患者 126 例,随机分为两组,对照组给予芪苈强心胶囊,观察组在对照组基础上加用比索洛尔。治疗 3 个月后,比较两组的疗效,以及治疗前后的血压、心率、6 min 步行最大距离、脑钠肽水平;采用超声心动图检测两组的左心室舒张末期容积、左心室射血分数、左心室短轴缩短率和左心室收缩末期容积。**结果:**观察组的有效率为 92.06 %(58/63),明显高于对照组的 73.02 %(46/63)($P<0.05$);治疗后两组血压无明显变化($P>0.05$),心率和脑钠肽水平明显降低($P<0.05$),6 min 步行最大距离明显增加($P<0.05$),且观察组明显优于对照组($P<0.05$);两组的左心室射血分数明显降低($P<0.05$),左心室舒张末期容积、左心室短轴缩短率和左心室收缩末期容积明显升高($P<0.05$),且观察组明显优于对照组($P<0.05$)。**结论:**芪苈强心胶囊联合比索洛尔能有效改善老年心力衰竭患者的心功能,具有较好的临床疗效。

关键词:芪苈强心胶囊;比索洛尔;心力衰竭;临床疗效

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Effect of Qiliqiangxin Capsule Combined with Bisoprolol on Elderly Patients with Heart Failure

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ABSTRACT Objective: To study the effect of Qiliqiangxin capsule combined with bisoprolol on elderly patients with heart failure.

Methods: 126 cases of elderly patients with chronic heart failure who were treated in our hospital from June 2015 to June 2016 were selected and divided into two groups randomly, the patients in control group were treated with Qiliqiangxin capsule, and the patients in observation group were treated with Qiliqiangxin capsule combined with bisoprolol. The curative effect, blood pressure, heart rate, 6min walking maximum distance, brain natriuretic peptide levels, left ventricular end diastolic volume, left ventricular ejection fraction, left ventricular short axis shortening rate, and left ventricular end systolic volume of the two groups were compared. **Results:** The effective rate of the observation group was 92.06 %(58/63), significantly higher than 73.02 %(46/63) of the control group ($P<0.05$); after treatment, there was no significant change in blood pressure of two groups ($P>0.05$), the heart rate and brain natriuretic peptide levels of two groups were significantly lower ($P<0.05$), 6 min walking distance of two groups were significantly increased ($P<0.05$), and it was significantly better in the observation group than that of the control group ($P<0.05$); the left ventricular ejection fraction was decreased significantly ($P<0.05$), and left ventricular end diastolic volume, left ventricular short axis shortening rate, and left ventricular end systolic volume was increased significantly ($P<0.05$), and it was significantly better in observation group than that of the control group ($P<0.05$). **Conclusions:** Qiliqiangxin capsule combined with bisoprolol can effectively improve the cardiac function in elderly patients with heart failure, has good clinical efficacy.

Key words: Qiliqiangxin capsule; Bisoprolol; Heart failure; Clinical effect

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前言

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心力衰竭是由炎症、心肌梗死等原因引起心肌结构和功能发生变化,最终导致心室泵血功能下降,是各种心脏疾病的终末阶段,冠状动脉硬化、心瓣膜疾病、慢性肺疾病、高血压等,均可导致心力衰竭的发生,在老年人群中较为常见,具有较高的发病率和死亡率^[1,2]。芪苈强心胶囊具有利尿、扩张心血管、强心等功能,可以有效缓解心力衰竭患者尿少、呼吸困难、水肿、腹胀等临床症状^[3]。比索洛尔在心力衰竭、心绞痛、高血压等的治疗中,对改善心功能及降低血压发挥着重要的作用^[4]。但临

床尚未见关于二者联合使用治疗心力衰竭的研究报道。本研究主要探讨了芪苈强心胶囊联合比索洛尔对老年心力衰竭患者的临床疗效。

1 资料和方法

1.1 一般资料

选择 2015 年 6 月~2016 年 6 月在我院进行诊治的老年心力衰竭患者 126 例,均符合相关诊断标准^[9],排除严重心律失常者、急性心力衰竭者、心源性休克者,有严重感染性疾病者和精神病患者。观察组 63 例,男 41 例,女 22 例;年龄 60~82 岁,平均(68.26±10.73)岁;病程 1~6 年,平均(3.96±2.53)年;伴有高血压心脏病 6 例,冠心病 12 例,扩张型心肌病 2 例,风心病 2 例;心功能 NYHA 分级:Ⅱ级 21 例,Ⅲ级 26 例,Ⅳ级 16 例。对照组 63 例,男 39 例,女 24 例;年龄 60~83 岁,平均(69.73±11.26)岁;病程 1~6 年,平均(4.23±2.19)年;伴有高血压心脏病 5 例,冠心病 11 例,扩张型心肌病 2 例,风心病 3 例;心功能 NYHA 分级:Ⅱ级 22 例,Ⅲ级 25 例,Ⅳ级 16 例。本研究获得我院伦理委员会的批准,所有患者均签署知情同意书。两组患者的基线资料比较无统计学差异($P>0.05$),具有可比性。

1.2 研究方法

两组均给予利尿、营养心肌、平衡电解质、扩血管、强心等常规抗心衰治疗。对照组口服芪苈强心胶囊(石家庄以岭药业生产,批号:Z20040141,规格:0.3 g),每次 1.2 g,每天 3 次。观

察组联合口服比索洛尔(德国默克公司生产,批号:H20100678,规格:5 mg),起始剂量为每天 2.5 mg,按照患者心功能分级情况 1~2 周递增 1 次用量(如果心功能分级为 2 级,1 周递增 1 次;如果心功能分级为 3 级,2 周递增 1 次),最高剂量为每天 10 mg。两组均进行 3 个月的治疗。

1.3 观察指标

比较两组治疗前后的血压、心率、6 min 步行最大距离,采用放射免疫法检测脑钠肽水平。采用超声心动图检测左心室舒张末期容积、左心室射血分数、左心室短轴缩短率和左心室收缩末期容积。

疗效标准^[9]:① 显效:心功能改善 2 个级别或以上者;② 有效:心功能改善 1 个级别者;③ 无效:心功能无任何改善,甚至加重者。总有效率=(显效+有效)/总数×100%。

1.4 统计学分析

采用 SPSS15.00 软件进行统计学分析,计量资料以 $\bar{x} \pm s$ 表示,两组间对比用 t 检验,计数资料用 χ^2 检验, $P<0.05$ 为差异有统计学意义。

2 结果

2.1 两组临床疗效的比较

观察组的有效率为 92.06%(58/63),明显高于对照组的 73.02%(46/63)($P<0.05$),见表 1。

表 1 两组临床疗效比较[例(%)]

Table 1 Comparison of the clinical effect between two groups [n(%)]

Groups	n	Effective	Valid	Invalid	The total effective rate
Observation group	63	21	37	5	92.06*
Control group	63	17	29	17	73.02

Note: Compared with control group, * $P<0.05$.

2.2 两组各观察指标的比较

治疗后两组血压无明显变化($P>0.05$),心率和脑钠肽水平

明显降低($P<0.05$),6 min 步行最大距离明显增加($P<0.05$),且观察组明显优于对照组($P<0.05$),见表 2。

表 2 两组各观察指标的比较($\bar{x} \pm s$)

Table 2 Comparison of the measured indexes between two groups($\bar{x} \pm s$)

Groups	n	Time	Systolic pressure (mmHg)	Diastolic pressure (mmHg)	Heart rate (n/min)	Brain natriuretic peptide(ng/mL)	6 min walking distance(m)
Observation group	63	Before treatment	130.25±11.34	80.26±7.93	85.12±7.25	5023.16±725.39	182.76±45.37
		After treatment	125.37±11.26	80.53±7.42	71.35±7.42**	1358.45±526.71**	365.48±62.53**
Control group	63	Before treatment	131.57±11.47	80.31±6.94	86.54±7.13	5017.42±694.73	181.56±43.29
		After treatment	126.35±12.31	80.15±7.12	76.29±7.45 [‡]	2253.45±632.75 [‡]	325.42±61.45 [‡]

Note: Compared with control group, * $P<0.05$; compared with before treatment, [‡] $P<0.05$.

2.3 两组心功能比较

两组的左心室射血分数明显降低($P<0.05$),左心室舒张末

期容积、左心室短轴缩短率和左心室收缩末期容积明显升高($P<0.05$),且观察组明显优于对照组($P<0.05$),见表 3。

表 3 两组心功能比较($\bar{x} \pm s$)Table 3 Comparison of cardiac function between two groups($\bar{x} \pm s$)

Groups	n	Time	Fractional shortening of the ventricular minor semi axis (L/m ²)	Left ventricular end systolic volume (ml)	Left ventricular ejection fraction (%)	Left ventricular end diastolic volume (mm)
Observation group	63	Before treatment	1.72± 0.13	38.72± 5.73	37.42± 6.94	60.73± 7.43
		After treatment	4.26± 0.37	62.51± 6.23	58.39± 6.25 [#]	43.25± 6.13 [#]
Control group	63	Before treatment	1.71± 0.25	39.25± 5.14	38.25± 7.12	61.75± 7.29
		After treatment	3.26± 0.34	50.26± 6.49	46.25± 6.38 [#]	52.39± 6.93 [#]

Note: Compared with control group, *P<0.05; compared with before treatment, [#]P<0.05.

2.4 不良反应

治疗后检查两组的电解质、肝肾功能、尿粪常规、血常规、血压、心率和心电图均发现明显异常,亦未发现明显不良反应。

3 讨论

心力衰竭是由于各种心脏疾病造成机体运动耐力下降、心脏功能不全、神经内分泌激活和心室重构为主要特征的临床综合征^[6-8]。随着我国人口老龄化的加重,老年心力衰竭患者呈逐年增加的趋势^[9]。血管扩张剂及正性肌力药物已广泛应用于临床心力衰竭的治疗,虽然在初期均可有效改善患者的临床症状,但不良反应较多,部分老年患者常不能耐受^[10-12]。芪苈强心胶囊的组方为:制附子、黄芪为君药;葶苈子、丹参、人参为臣药;泽泻、香加皮、玉竹、红花、陈皮为佐药,方中人参补气强心,黄芪益气利水,丹参活血,泽泻利水消肿,红花活血化瘀,合用可以通达气血经络,阻断水肿及淤血的形成,达到利水、强心、消肿的治疗目的^[13]。现代药理研究发现,芪苈强心胶囊能明显降低血管紧张素Ⅱ水平,抑制醛固酮水平的升高,改善心室壁的厚度,从而有效改善心功能、抑制心室重塑^[14]。

由于老年心力衰竭患者临床表现复杂、病情较重,大多合并有肾功能不全、感染、心脏瓣膜病等疾病,在临床治疗的过程中应密切注意由于患者心功能不全引起的交感神经系统的激活,以及心率加快、血压升高等不良反应^[15,16]。而比索洛尔是一种选择性β₁受体阻滞剂,能抑制交感神经兴奋,降低儿茶酚胺的浓度,有效控制患者的心率和血压,具有疗效确切、特异性高、半衰期长、不良反应少和肝肾双通道排泄等优点^[17-19]。本研究创新性的将芪苈强心胶囊与比索洛尔联合使用治疗老年心力衰竭,结果显示,观察组的有效率为92.06%(58/63),明显高于对照组的73.02%(46/63)(P<0.05),提示芪苈强心胶囊与比索洛尔中西医结合治疗对老年心力衰竭具有较好的疗效。治疗后两组血压无明显变化(P>0.05),心率和脑钠肽水平明显降低(P<0.05),6min步行最大距离明显增加(P<0.05),且观察组明显优于对照组(P<0.05)。脑钠肽作为评估心力衰竭患者病情较为客观的临床观察指标,其水平随心力衰竭程度的加重而升高,能直接反映心力衰竭的严重程度^[20]。本结果提示芪苈强心胶囊联合比索洛尔可以有效降低老年心力衰竭患者的心衰程度。两组的左心室射血分数明显降低(P<0.05),左心室舒张末期容积、左心室短轴缩短率和左心室收缩末期容积明显升高(P<0.05),且观察组明显优于对照组(P<0.05),提示芪苈强心胶囊联合比索

洛尔可以有效改善老年心力衰竭患者的心功能。分析其原因为芪苈强心胶囊可以抑制神经内分泌系统的激活,促进血管内皮功能的恢复,从源头上遏制心功能恶化及心肌损伤;而比索洛尔具有较强的上调β₁受体、抗缺氧、抗氧化、减轻左心室重量和逆转左心室重构的功能^[21];二者合用能最大程度的发挥改善心功能的作用。治疗后检查两组的电解质、肝肾功能、尿粪常规、血常规、血压、心率和心电图均发现明显异常,亦未发现明显不良反应。提示芪苈强心胶囊联合比索洛尔具有较好的安全性,临床应用价值较高。

综上所述,芪苈强心胶囊联合比索洛尔能有效改善老年心力衰竭患者的心功能,具有较好的临床疗效。

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为 DAP44 是胰腺癌的一个潜在血清生物标志物。我们下一步将扩大检测样本量,同时与 CA19-9 进行对比研究,对胰腺癌患者的诊断、临床治疗以及预后进行长期随访,进一步去验证 DAP44 在胰腺癌诊断中的价值和意义。

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