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参麦注射液联合不同类型他汀类药物治疗不稳定型心绞痛的近期疗效比较 *

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摘要 目的:探究参麦注射液联合不同类型他汀类药物治疗不稳定型心绞痛的近期疗效。**方法:**收集本院收治的不稳定型心绞痛患者 37 例,随机分成实验组与对照组。对照组 18 例予参麦注射液联合普伐他汀治疗;实验组 19 例予参麦注射液联合阿托伐他汀治疗。比较两组治疗前后血脂水平的变化及临床疗效。**结果:**治疗后,两组总胆固醇(TC)、低密度脂蛋白(LDL-C)水平均较治疗前显著下降(P<0.05),心绞痛发作次数及时间均明显减少或缩短(P<0.05);与对照组相比,实验组治疗后的 TC、LDL-C 水平均较低(P<0.05);不良反应发生率(15.8%)低于对照组(27.8%)(P<0.05)。**结论:**参麦注射液联合不同类型他汀类药物治疗不稳定型心绞痛的近期疗效相当,但阿托伐他汀治疗可更有效降低患者的血脂水平,安全性更高。

关键词:冠心病;不稳定型心绞痛;参麦注射液;他汀类药物

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Short-term Effects of Shen Mai Injection Combined with Different Types of Statins in the Treatment of Unstable Angina Pectoris*

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ABSTRACT Objective: To investigate the short-term effects of Shen Mai Injection combined with different types of statins in the treatment of unstable angina pectoris. **Methods:** 37 cases with unstable angina pectoris were selected and randomly divided into the control group and the experimental group. 18 cases in the control group were treated by Shenmai injection combined with pravastatin and 19 cases in the experimental group were treated by Shen Mai injection combined with atorvastatin. The changes of blood lipid level and clinical therapeutic after treatment were compared between two groups. **Results:** After treatment, the total cholesterol (TC) and low density lipoprotein (LDL-C) levels in both groups were significantly decreased(P<0.05), the frequency and duration of angina attack were significantly reduced or shortened (P<0.05). Compared with the control group, the TC and LDL-C levels were lower in the experimental group after treatment (P<0.05), the incidence of adverse reactions (15.8%) was lower than that of the control group (27.8%)(P<0.05). **Conclusion:** The short-term effects of shenmai injection combined with atorvastatin was equal to pravastatin in the treatment of unstable angina pectoris, but atorvastatin could reduce the blood lipid level more effectively and was more safe.

Key words: Coronary heart disease; Unstable angina; Shen Mai injection; Statins

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冠心病(coronary heart disease,CHD)属于心血管内科常见疾病,当患者的动脉发生粥样硬化后引起冠状动脉管腔的狭窄甚至闭塞,从而引起患者的心肌出现缺血缺氧或坏死诱发心脏病[1]。不稳定型心绞痛是冠心病急症中的一种,临床表现为在原有相关性心绞痛的基础上疼痛更加强烈、持续时间更长,或是在一个月内新发的仅因轻体力劳动甚至静息时都会出现的心绞痛[2]。我国冠心病患者数目高达 1.6 亿人,其中不稳定型心绞痛的病死率达 1.5%[3]。动脉粥样硬化性疾病的发生多与血脂异常紧密相关,故而治疗不稳定型心绞痛的关键就是降血脂[4]。他汀类药物能够有效降低血脂稳定斑块,延缓斑块的发展,缓解心绞痛症状[5]。参麦注射液是中药制剂,可通过提高细胞的抗氧化酶活性改善体循环,从而减轻心绞痛的症状[6]。本实验通过测定患者治疗前后血脂水平的变化来评价参麦注射液联合不同类型他汀类药物对不稳定型心绞痛患者的临床疗效及安全性。

1 资料与方法

1.1 病历选择

收集我院收治的不稳定型心绞痛的患者 37 例, 随机分成实验组及对照组。对照组 18 例,男性 11 例,女性 8 例,年龄 41~64 岁,平均(47.2± 5.4)岁,病程 1.5~8.9 年,平均(4.3± 0.6)年;实验组 19 例,男性 10 例,女性 9 例,年龄 38~60 岁,平均(45.8± 5.6)岁,病程 1.9~10 年,平均(5.1± 0.5)年。两组患者性别、年龄、病程等比较,差异均无统计学意义(P>0.05)。患者符合《内科学》中对冠心病的诊断标准;胸口常有压迫感合并剧烈疼

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痛感，伴有向四肢及背部的放射性疼痛；患者采取舌下含服硝酸甘油后只能不完全性的缓解；出现静息痛或夜间痛；血脂异常；X 线、超声及冠状动脉造影等影像学检查示血管狭窄性或扩张性改变。此次研究经由本院伦理委员会批准，并已签署知情同意书。排除妊娠或哺乳期妇女；心肌酶谱异常的心绞痛患者；严重肝肾疾病；心血管性疾病；恶性肿瘤患者；近期内行冠状动脉介入治疗或抗凝治疗者；近来服用过胆固醇类药物者；服药期间需服用炎症抑制药物或阿片类药物者；对药物过敏者，依从性不好者。

1.2 治疗方法

两组患者均行生活方式干预及调整，调整饮食结构，多食富有维生素 C、植物蛋白食物，减少对高脂高胆固醇食物的摄入，严格控制饮食量、限制饮酒与糖类的摄入，嘱患者戒烟，进行适当运动；避免劳累、情绪激动；控制其他危险因素如高血压、糖尿病等。对照组予参麦注射液(四川升和药业股份有限公司，国药准字 Z20053254) 将 40 mL 参麦注射液注入 250 mL 5%葡萄糖注射液中，每日一次静脉滴注，连续注射 15 天，普伐他汀 (美百乐镇，第一三共制药 (上海) 有限公司，国药准字 H20040101)20 mg，每次一片，每日一次睡前口服；实验组：参麦注射液(四川升和药业股份有限公司，国药准字 Z20053254)，将 40 mL 注入 250 mL 5%葡萄糖注射液中，每日一次静脉地主，连续注射 15 天。阿托伐他汀钙片 (北京嘉林药业股份有限公司，国药准字 H20093819)20 mg，每次一片，每日一次睡前口服。治疗前后空腹采集两组患者 3 mL 肘静脉血，采血后将其装入预有 EDTA 的抗凝采血管，以 3000 r/min 的转速离心 10 min，吸取上层血清于 EP 管中，置入 -20℃冰箱中保存备用。测定治疗前后血脂水平等指标。

1.3 检测方法

血脂检测使用济南汉方医疗器械有限公司生产的 HF240-300 快速血糖血脂仪进行检测，严格按照盒上操作说明及步骤进行检测。

1.4 不良反应

在进行治疗期间，对所有参与对象定期进行复查，对患者发生的不良反应予对症治疗。

1.5 疗效评价标准

根据疗效指标血脂水平变化情况分为显效、有效和无效三个等级。显效：患者心绞痛不发作，TC 下降≥ 1.0 mmol/L、LDL-C≥ 1.0 mmol/L；有效：患者心绞痛仍有发作但持续时间短，次数减少，TC 水平下降≥ 0.5 mmol/L、LDL-C 水平≥ 0.5 mmol/L；无效：患者心绞痛仍发作，并且发作时间与次数无明显改变，TC 水平下降 <0.5 mmol/L、LDL-C 水平 <0.5 mmol/L。总有效率 =(显效 + 有效)/ 总病例数× 100%。

1.6 统计学分析

使用 SPSS 17.0 统计学软件对结果进行统计分析，采取 "$\bar{x}\pm s$" 来表示正态计量数据，采用 t 检验，计数资料以率表示，采用 X^2 检验，以 P<0.05 为差异具有统计学意义。

2 结果

2.1 两组临床疗效的比较

实验组患者总有效率(94.7%)高于对照组(88.9%)，但组间差异没有统计学意义(P>0.05)。见表 1。

表 1 两组患者治疗后临床疗效的比较【例 (%)】

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

Groups	Case	Excellence	Effective	Invalid	Total clinical curative effect rate
Control group	18	7(38.9)	9(50.0)	2(11.1)	16(88.9)
Experimental group	19	8(42.1)	10(52.6)	1(5.3)	18(94.7)*

Note: Compared with the control group,*P>0.05 .

2.2 两组患者治疗前后血脂水平的比较

两组患者治疗后 TC、LDL-C 水平均较治疗前显著下降(P<0.05)，其差异具有统计学意义(P<0.05)；而与对照组相比，实验组的 TC、LDL-C 水平更低(P<0.05)，组间比较差异存在统计学意义(P<0.05)。见表 2。

表 2 两组患者治疗前后 TC、LDL-C 水平比较($\bar{x}\pm s$)

Table 2 Comparison of the TC and LDL-C levels between two groups before and after treatment ($\bar{x}\pm s$)

Groups	Case	TC(mmol/L)		LDL-C(mmol/L)	
		Before treatment	After treatment	Before treatment	After treatment
Control group	18	4.8± 0.6	4.1± 0.6*	3.2± 0.4	2.9± 0.3*
Experimental group	19	5.1± 0.6	3.7± 0.4*#	3.3± 0.6	2.4± 0.3*#

Noe: Compared with before treatment, *P<0.05.Compared with the control group after treatment, #P<0.05.

2.3 两组患者治疗后心绞痛发作情况的比较

两组患者治疗后心绞痛发作次数及时间均较治疗前显著减少或缩短(P<0.05)，但组间比较差异无统计学意义(P>0.05)。见表 3。

2.4 两组不良反应发生情况的比较

实验组的不良反应如便秘、消化不良、恶心呕吐、腹痛和肌

痛的发生率(15.8%)低于对照组(27.8%),差异有统计学意义 (P<0.05)。见表 4。

表 3 两组患者心绞痛的发作次数及持续时间的比较($\overline{\chi}\pm$ s)

Table 3 Comparison of the frequency and duration of angina pectoris between two groups ($\overline{\chi}\pm$ s)

Group	Case	Attack times (times / week)		Duration of angina (min/time)	
		Before treatment	After treatment	Before treatment	After treatment
Control group	18	11.2± 1.3	5.4± 0.6*	8.3± 0.9	4.5± 0.5*
Experimental group	19	12.1± 1.3	5.1± 0.5*#	7.9± 0.8	4.3± 0.4*#

Noe: Compared with before treatment, *P<0.05. Compared with the control group after treatment, #P<0.05.

表 4 两组治疗后不良反应的发生情况比较($\overline{\chi}\pm$ s)

Table 4 Comparison of the incidence of adverse reactions between two groups after treatment($\overline{\chi}\pm$ s)

Group	Case	Constipation	Indigestion	Nausea and vomiting	Abdominal pain	Myosalgia	Total incidence rate
Control group	18	0(0.0)	1(5.6)	1(5.6)	1(5.6)	2(11.1)	5(27.8)
Experiment group	19	1(5.3)	1(5.3)	0(0.0)	1(5.3)	0(0.0)	3(15.8)*

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

3 讨论

冠心病是机体的血脂代谢异常时导致的心肌功能障碍疾病,因心脏的冠脉供血减少不能满足代谢的需求,进而引起心肌暂时性或持续性缺血缺氧而导致的症状[7]。心绞痛的临床表现是出现胸骨后部的压榨性疼痛或憋闷并向左肩部及背部放射[8]。不稳定型心绞痛患者的症状更加持久而频繁,出现夜间疼痛、轻体力劳动后甚至是静息时即可出现心绞痛的发作,发作时可出现新的相关症状如恶心呕吐、出汗心悸等[9]。发生心肌缺血时,超声心动图能够检测到左心室的室壁暂时性的节段活动下降或无运动发生,当缺血恢复后,室壁的运动即恢复正常。不稳定型心绞痛常易并发急性心肌梗死,增加患者的危险,因此在对不稳定心绞痛的患者进行治疗时应积极降脂,预防并发症的发生[10]。

引起动脉粥样硬化性疾病发生的主要原因之一就是体内自由基的含量快速增加,加速了机体的老化进程[11]。而参麦注射液就是具有能有效清除氧自由基,并提高细胞抗氧化酶活性能力的中药制剂,由麦冬、五味子、人参皂苷等组成。其中麦冬能够增加冠脉血流量增强心肌收缩力,并达到清除氧自由基的作用[12]。五味子为一种强效抗氧化剂,可以抑制自由基的生成增强心脏机能,保护机体的心脏组织。人参皂苷具有增强患者心肌功能,同时清除患者体内的自由基含量并改善心肌缺血再灌注损伤的作用[13]。参麦注射液通过各类中药的互补协调,使冠状动脉血流量增加,调整机体的微循环,降低心肌耗氧改善心功能的作用[14]。

临床上常用的降脂药物是他汀类,通过竞争性抑制胆固醇合成所需的内源性胆固醇合成限速酶(HMG-CoA)还原酶的活性,发挥减少胞内胆固醇合成的作用,进而可以刺激低密度脂蛋白(LDL)数量增加活性增强,延缓动脉斑块形成[15,16]。总胆固醇(TC)及 LDL-C 对动脉粥样硬化的形成有着重要的作用,以 TC 的影响最大。他汀类药物能够加快清除体内的 LDL-C,使高密度脂蛋白(HDL-C)含量增高,平衡体内 LDL-C 与 TC 水平使其下降[17]。他汀类药物可以分为两大类:天然化合物包括普伐他汀等,完全人工合成化合物如阿托伐他汀等[18]。普伐他汀在机体内通过两个方面发挥效应[19]:(1)通过抑制 HMG-CoA 还原酶的活性降低了胞内胆固醇含量;(2) 上调胞体表面 LDL 受体数量达到降脂的作用。阿托伐他汀属于 HMG-CoA 还原酶选择性抑制剂,选择性抑制肝脏内胆固醇的合成,降低血浆胆固醇水平,上调 LDL 受体加强分解代谢[20]。

本试验结果示参麦注射液联合不同他汀类药物治疗的患者总有效率、心绞痛的发作次数及时间比较并无统计学差异,提示不同类型的他汀类药物均能够有效的缓解症状,不管是天然化合物还是完全人工合成化合物联合参麦注射液治疗后都能够有效缓解患者的心绞痛症状。此外,说明两种药物均能有效降低血脂,改善冠脉血流,但阿托伐他汀的降脂效果好于普伐他汀,可能与其组成成分相关。两组的不良反应发生率的结果显示患者对阿托伐他汀的耐受性更高,提示其安全性更好。

综上所述,参麦注射液联合不同类型的他汀类药物治疗不稳定心绞痛患者时,能有效改善患者心悸、疼痛等心绞痛症状,降低患者血总胆固醇水平, 阿托伐他汀的安全性由于普伐他汀。

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