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## 养血清脑颗粒对老年脑梗死后抑郁患者血清胱抑素 C 及认知功能的影响 \*

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**摘要 目的:**探究养血清脑颗粒对老年脑梗死后抑郁患者血清胱抑素 C 水平的影响及认知功能水平的影响。**方法:**选取 2015 年 6 月到 2016 年 6 月我院神经内科收治的老年脑梗死后抑郁患者 74 例,根据随机数字对照表分为对照组与试验组,各 37 例。对照组采用口服盐酸帕罗西汀治疗,试验组联合给予养血清脑颗粒治疗,4 周为一个疗程,共治疗一个疗程。比较两组患者临床疗效、血清胱抑素 C 水平及认知功能水平。**结果:**治疗结束后,与对照组相比,试验组临床总有效率较高( $P < 0.05$ ),治疗后两组血清胱抑素 C 水平较治疗前降低( $P < 0.05$ ),MMSE 评分较治疗前升高( $P < 0.05$ );与对照组相比,血清胱抑素 C 水平较低( $P < 0.05$ ),MMSE 评分较高( $P < 0.05$ )。**结论:**养血清脑颗粒治疗老年脑梗死后抑郁患者临床疗效显著,认知功能明显改善,推测其与血清胱抑素 C 水平降低有关。

**关键词:**养血清脑颗粒;脑梗死;抑郁;血清胱抑素 C;认知功能

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## Effects of Yangxue Qingnao Granule on the Levels of Serum Cystatin C and Cognition Function in Senile Patients with Depression after Cerebral Infarction\*

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**ABSTRACT Objective:** To investigate the effects of yangxue qingnao granule on the levels of serum cystatin C and cognition function in senile patients with depression after cerebral infarction. **Methods:** 74 patients with senile patients with depression after cerebral infarction who were treated in our hospital neurology department from June 2015 to June 2016 were selected, and randomly divided into control group and experiment group, with 37 cases in each group. The patients in the control group were treated with conventional drugs treatment, oral paroxetine hydrochloride, and the patients in the experiment group were treated with conventional drugs treatment combined with yangxue qingnao granule. 4 weeks were for a course of treatment, a total of a course of treatment. After treatment, the clinical efficacy, serum C cystatin and cognitive function levels were compared between in the two groups. **Results:** After treatment, compared with the control group, the clinical total effective rate of the experiment group was higher ( $P < 0.05$ ), and the serum cystatin C level of the two groups were lower than before treatment after treatment ( $P < 0.05$ ), the MMSE scored was higher than before treatment ( $P < 0.05$ ); compared with control group, the serum cystatin C level of the experiment group was lower ( $P < 0.05$ ), MMSE scored was higher ( $P < 0.05$ ). **Conclusions:** Yangxue qingnao granule in the treatment of patients with senile depression after cerebral infarction has remarkable clinical effect, and can significantly improve cognitive function, which may be relate to reduction of serum cystatin C level.

**Key words:** Yangxue qingnao granule; Senile; Depression after cerebral infarction; Serum cystatin C; Cognitive function

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### 前言

脑梗死后抑郁是脑梗死的常见并发症,发病率为 30%~40%,其严重影响患者的生活质量,因此被越来越多的临床医生

所重视<sup>[1]</sup>。由于传统的抗抑郁药物对于脑梗死患者不良反应较大,且较容易引起药物之间的相互作用,药物安全性差,因此并没有广泛应用于脑梗死后抑郁的治疗<sup>[2]</sup>。而养血清脑颗粒主要成分有当归、川芎、白芍、熟地黄等,具有养血平肝,活血通络等

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功效,对脑梗死患者有治疗作用,同时对脑梗死抑郁也有一定的疗效<sup>[3]</sup>。血清胱抑素 C 是一种半胱氨酸蛋白酶抑制剂,研究发现<sup>[4,5]</sup>,血清胱抑素 C 水平与脑梗死密切相关,同时还与脑梗死患者的认知功能障碍相关,若血清胱抑素 C 水平升高,则更容易发生认知功能减退。但是,目前关于养血清脑颗粒是否对老年脑梗死后抑郁患者血清胱抑素 C 及认知功能产生影响尚无报道,本研究以神经内科收治的 74 例老年脑梗死后抑郁患者为研究对象,探讨血清脑颗粒对老年脑梗死后抑郁患者血清胱抑素 C 水平的影响及认知功能水平的影响,为临床用药提供可靠的依据。

## 1 资料与方法

### 1.1 临床资料

本试验选取 2015 年 6 月到 2016 年 6 月我院神经内科收治的老年脑梗死后抑郁患者 74 例,按随机数字表法,将 74 例患者随机分配成两组,试验组 37 例,男女比为 21/16,平均年龄( $68.12 \pm 6.23$ )岁,平均病程( $47.69 \pm 8.18$ )天,HAMD 评分( $14.92 \pm 5.41$ )分;对照组 37 例,男女比为 20/17,平均年龄( $67.85 \pm 6.60$ )岁,平均病程( $48.14 \pm 8.09$ )天,HAMD 评分( $15.16 \pm 5.38$ )分。两组患者一般资料无统计学差异( $P > 0.05$ ),能够对试验观察指标进行比较。纳入标准:①符合 2014 年制定的《中国急性期缺血性脑卒中诊疗指南》中的诊断标准,同时影像学检查颅脑 MRI 或 CT 确诊为脑梗死;②符合 ICD-10 抑郁症的诊断标准;③ HAMD 评分  $> 7$  分;④年龄 60~80 岁;⑤患者依从性良好,患者本人或其家属知情并同意参与本试验。

### 1.2 方法

所有患者均进行脑梗死治疗,改善微循环,防止复发,对脑梗死原发病高血压、糖尿病等疾病常规给药,控制血压及血糖。对照组采用常规药物治疗,口服盐酸帕罗西汀(中美天津史克制药有限公司,国药准字 H10950043),每次 20 mg,每日一次。试验组在常规药物治疗的基础上给予养血清脑颗粒(天津天士

力制药股份有限公司,国药准字 Z10960082),每次 4 g,每日三次。4 周为一个疗程,共治疗一个疗程。

### 1.3 观察指标

**1.3.1 临床疗效评定指标** 汉密顿抑郁量表(HAMD)能够对抑郁病情进行评估,病情越重,得分越高。分别对脑梗死后抑郁患者治疗前后进行 HAMD 评分,根据 HAMD 评分的减分率进行抑郁疗效评定,HAMD 治疗前后减分率 = (治疗前评分 - 治疗后评分) / 治疗前评分  $\times 100\%$ 。临床疗效评价标准:①治愈:减分率  $> 75\%$ ;②有效:减分率在  $25\% \sim 75\%$  之间;③无效:减分率在  $25\%$  以下。

**1.3.2 血清胱抑素 C 检测** 采集治疗前后患者空腹静脉血 10 mL,静置 30 min 后,3000 rpm 离心 10 min,将血清分离,  $-80\text{ }^{\circ}\text{C}$  保存,待所有样本采集完毕后采用乳胶颗粒增强免疫投射比浊法测定血清胱抑素 C 水平。免疫比浊法试剂盒购于上海榕柏生物技术有限公司。上述操作由专业人员统一进行。

**1.3.3 认知功能评价** 采用老年人认知功能智力状态简易评价量表(MMSE),分别从定向力、记忆力、注意力、计算力、回忆能力及语言能力对治疗前后患者的认知功能进行评价。满分 30 分,分数低于 27 分为认知功能障碍,分数越低,认知功能水平越低。

### 1.4 统计学指标

数据处理使用 SPSS13.0 软件,临床疗效采用%表示,使用卡方检验比较;血清胱抑素 C 水平及 MMSE 评分用均数  $\pm$  标准差表示,使用 t 检验分析,均以  $P < 0.05$  为差异显著,具有统计学意义。

## 2 结果

### 2.1 两组患者临床总有效率比较

试验组的总有效率为 91.89%,对照组总有效率为 75.68%,与对照组相比,试验组临床总有效率较高,差异具有统计学意义( $P < 0.05$ ),如表 1。

表 1 两组患者临床疗效比较 [n(%)]

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

| Groups                  | Excellent  | Effective  | Invalid   | Total effective rate |
|-------------------------|------------|------------|-----------|----------------------|
| Experiment group (n=37) | 14 (37.84) | 20 (54.05) | 3 (8.11)  | 34 (91.89)*          |
| Control group (n=37)    | 10 (27.03) | 18 (48.65) | 9 (24.32) | 28 (75.68)           |

Note: Compared with the control group after treatment, \* $P < 0.05$ .

### 2.2 血清胱抑素 C 水平比较

两组患者在接受治疗前,血清胱抑素 C 水平无明显差异( $P > 0.05$ ),治疗后,试验组及对照组血清胱抑素 C 水平均显著

降低( $P < 0.05$ ),且试验组血清胱抑素 C 水平较对照组低( $P < 0.05$ ),见表 2。

表 2 两组患者治疗前后血清胱抑素 C 变化比较( $\bar{x} \pm s$ )

Table 2 Comparison of the serum cystatin C between two groups before and after treatment( $\bar{x} \pm s$ )

| Group                   | Time point       | Serum cystatin C (mg/L) |
|-------------------------|------------------|-------------------------|
| Experiment group (n=37) | Before treatment | $1.63 \pm 0.32$         |
|                         | After treatment  | $0.81 \pm 0.17^{* \#}$  |
| Control group (n=37)    | Before treatment | $1.61 \pm 0.30$         |
|                         | After treatment  | $1.32 \pm 0.15^{*}$     |

Note: Compared with before treatment, \* $P < 0.05$ . Compared with the control group,  $^{\#}P < 0.05$ .

### 2.3 认知功能评价

两组患者在接受治疗前,MMSE 评分无明显差异( $P>0.05$ ),治疗后,试验组及对照组 MMSE 评分较治疗前升高( $P<0.05$ ),且试验组 MMSE 评分较对照组高( $P<0.05$ ),见表 3。

表 3 两组患者 MMSE 评分比较( $\bar{x} \pm s$ )  
Table 3 Comparison of the MMSE score between two groups ( $\bar{x} \pm s$ )

| Groups                  | Time point       | MMSE score         |
|-------------------------|------------------|--------------------|
| Experiment group (n=37) | Before treatment | 20.59 $\pm$ 1.84   |
|                         | After treatment  | 25.94 $\pm$ 2.37** |
| Control group (n=37)    | Before treatment | 20.48 $\pm$ 1.95   |
|                         | After treatment  | 23.16 $\pm$ 2.02*  |

Note: Compared with before treatment, \* $P<0.05$ . Compared with the control group, \*\* $P<0.05$ .

### 3 讨论

养血清脑颗粒的主要成分有当归、川芎、白芍、熟地黄、钩藤、鸡血藤、夏枯草、决明子、珍珠母、延胡索、细辛等,其中当归、川芎、白芍、熟地黄、延胡索、细辛有活血的功效,改善脑梗死患者脑部微循环<sup>[7]</sup>;鸡血藤有通经活络功效;珍珠母具有安神定惊,改善睡眠、认知功能等,对抑郁等有较好的治疗效果<sup>[8]</sup>。大量研究表明<sup>[9-11]</sup>,养血清脑颗粒治疗急性脑梗死有较好的效果,能够改善脑部血液循环,增加脑部血流量,抑制  $Ca^{2+}$  内流,从而保护脑组织,同时由于其含有珍珠母等对脑梗死后抑郁也有一定的治疗效果,能够缓解抑郁状态,改善认知功能。本研究治疗结束后发现,试验组临床总有效率较对照组高,试验组 MMSE 评分较对照组高,这与以往临床报道结果相同,但本结果 MMSE 评分较以往临床结果高,可能与本研究中治疗时间与用药方式有关,说明养血清脑颗粒对于老年脑梗死后抑郁患者有较好的治疗效果,能够改善患者的认知功能水平,且本研究中临床疗效显著,值得临床推广使用。

血清胱抑素 C 是有 122 个氨基酸构成的低分子量蛋白质,是一种半胱氨酸蛋白酶抑制剂,能够较好的评价肾小球的滤过功能,进而评价肾功能<sup>[12]</sup>。而近年来研究发现<sup>[13-15]</sup>,血清胱抑素 C 为脑梗死发生的独立危险因素,能够参与到动脉粥样硬化斑块的形成,在脑梗死的发生发展过程中起到重要的作用,因此如果干预血清中胱抑素 C 的水平,能够抑制脑梗死的发生发展<sup>[16,17]</sup>。同时血清胱抑素 C 还与认知功能密切相关,若血清胱抑素 C 水平升高,则更容易发生认知功能减退,因此血清胱抑素 C 可能与脑梗死后抑郁所致的认知功能减退有关<sup>[18-20]</sup>。我们推测血清脑颗粒治疗老年脑梗死后抑郁,改善认知功能是通过降低血清胱抑素 C 水平的作用。本试验组对试验组及对照组患者治疗前后进行血清胱抑素 C 检测,治疗结束后,试验组及对照组血清胱抑素 C 水平均显著降低,且试验组血清胱抑素 C 水平较对照组低,说明血清脑颗粒能够降低老年脑梗死后抑郁患者血清胱抑素 C 水平,从而改善脑梗死后抑郁状态,提高患者的认知水平。

综上所述,养血清脑颗粒对老年脑梗死后抑郁患者有显著的临床疗效,认知功能明显改善,推测其与血清胱抑素 C 水平降低有关。

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