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醒脑静注射液对急性脑出血患者 FIB 和 D- 二聚体水平的影响 *

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摘要 目的：研究醒脑静注射液对急性脑出血患者血浆纤维蛋白原和 D- 二聚体水平的影响。**方法：**选取我院神经内科收治的急性脑出血患者 90 例，随机分为两组，其中对照组 45 例，予降低颅内压、控制血压、抗感染、营养脑细胞等常规治疗。实验组 45 例，在常规治疗的基础上加用醒脑静注射液。对比治疗前后患者血浆纤维蛋白原（FIB）、D- 二聚体（D1-D）的含量及临床疗效。**结果：**治疗后，两组患者病情均有所改善，实验组有效率（91.11 %）与对照组（82.22 %）比较明显较高，差异有统计学意义（P＜0.05）；两组患者血浆 FIB 含量较治疗前均明显升高，但实验组高于对照组，差异有统计学意义（P＜0.05）；实验组血浆 D-D 含量明显降低，对照组明显升高，实验组明显低于对照组，差异有统计学意义（P＜0.05）。**结论：**醒脑静注射液能够使急性脑出血患者血浆纤维蛋白原含量增加，D- 二聚体水平下降，具有良好的临床疗效，值得进一步研究推广。

关键词：急性脑出血；醒脑静；纤维蛋白原；D- 二聚体

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Effect of Xingnaojing Injection on Plasma Fibrinogen in Serum and D- two Dimer Level in Acute Cerebral Hemorrhage Patients*

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ABSTRACT Objective: To study the effect of Xingnaojing injection on blood plasma fibrinogen in serum and D- two dimer levels in acute cerebral hemorrhage patients. **Methods:** 90 patients with acute cerebral hemorrhage were selected from department of neurology in our courtyard hospital. All the patients were randomly divided into two groups, 45 patients in control group, who were treated with conventional methods such as reducing intracranial pressure, controlling blood pressure, antiinfection, nutrition of brain cells and others, and 45 cases in the experimental group, who were treated with Xingnaojing injection on the basis of conventional therapy. The level of plasma fibrinogen in patients with (FIB), D-two dimer (D-D) and the clinical curative effect was compared before and after treatment. **Results:** After treatment, the symptoms of two groups of patients were improved, and the total efficiency of the experimental group (91.11%) was significantly higher than that of the control group (82.22%), with statistical significance (P<0.05). After treatment, the content of plasma FIB in both of two groups were significantly increased than before treatment, but in the experimental group, it was higher than that in the control group, and the difference is statistically significant (P<0.05). The content of D-two dimer was significantly reduced in experimental group, while in the control group, its content was increased significantly, and it was significantly lower in the experimental group than that of the control group, and the difference was statistically significant (P<0.05). **Conclusion:** Xingnaojing injection can increase blood plasma fibrinogen in serum and lower D- two Dimer level in acute cerebral hemorrhage, suggesting it has good curative effect for this disease and is worthy of further promotion.

Key words: Acute cerebral hemorrhage; Xingnaojing injection; Fibrinogen; D-two dimer

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前言

脑出血（intracerebral hemorrhage，ICH）[1]指由于高血压合并小动脉硬化、动脉瘤等原因导致的原发性非外伤性脑实质内出血，是常见的出血性脑血管病。临床根据出血部位以及出血量的不同，可以有剧烈头痛、对侧偏瘫、偏身感觉障碍、认知障碍、失语等临床表现[2]，严重者可出现脑水肿、颅内压升高、脑疝等表现，危及生命。中医属“中风”“卒中”范畴[3]。本病多发生于 45-60 岁的中老年人群。据调查统计[4]，我国 ICH 的发病率为每年 60-80/10 万，占全部脑血管病的 20%-30%，并有逐年上升的趋势，其中 70%左右为高血压导致的壳核及内囊出血。随着医学技术的发展，人们更加重视本病防治及预后，现代医学多采取降低颅内压、控制血压、亚低温治疗、防治感染、防治应激性溃疡等对症疗法[5]，但控制出血效果并不明显。研究发现[6]，醒脑

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静能够影响体内纤维蛋白原、D- 二聚体水平，改善凝血功能，控制出血。为了提高脑出血的治疗疗效，改善其预后，我们通过观察血浆纤维蛋白原 (blood plasma fibrinogen，FIB)、D- 二聚体（D-two dimer，D-D）水平以及临床疗效，探究醒脑静对急性脑出血患者凝血功能的影响，现报道如下。

1 资料与方法

1.1 临床资料

选取 2011 年 1 月至 2014 年 1 月于我院以急性脑出血为诊断而收入院患者 90 例，采用随机数字表分为实验组和对照组。诊断标准：中老年活动中或激动时突然发病；出现头痛、呕吐等颅高压症状以及局灶性神经功能缺损症状；头颅 CT 检查显示存在出血灶。实验组 45 例，其中男 27 例，女 18 例，平均年龄 53.4± 6.7 岁；对照组 45 例，其中男 25 例，女 20 例，平均年龄 50.1± 5.9 岁。两组患者的一般资料相仿，差异无统计学意义（P＞0.05）。患者自愿参与本实验，并签署知情同意书。方案获得我院伦理委员会批准并全过程跟踪。

1.2 纳入及排除标准

纳入病例均首次发病，时间 <24 h；符合脑出血诊断标准，并经头颅 CT 证实；头 CT 显示出血部位为基底节区；出血量为 5-15 mL；神经功能缺损评分（NIHSS）≤ 25。排除凝血功能障碍等血液系统疾病；肝、胆严重疾病；恶性肿瘤；神志异常；由于各种原因不能完成实验的患者。

1.3 治疗方法

对照组参照临床用药指南[7]，给予常规治疗，让患者绝对卧床休息，保持安静，监测呼吸、血压、心率等生命体征，清理呼吸道分泌物或吸入物，保持呼吸道通畅，维持水、电解质以及营养平衡。给予 200 mL 甘露醇静滴，每 8 小时一次，疗程为 7 天，以脱水降低颅内压；调整血压，将血压控制在 180/105 mmHg 以下；对症营养脑细胞，处理感染、应激性溃疡等治疗。实验组在常规治疗的基础上加用醒脑静注射液 40 mL，配合 250 mL 0.9 %氯化钠注射液静滴，每天一次，7 天为一个疗程，共两个疗程。治疗前后分别观察两组患者血浆 FIB、D- 二聚体水平以及临床疗效。注意事项：用药期间，禁食生冷辛辣等刺激性食物，戒烟酒，保持患者情绪稳定。

1.4 疗效评定

根据全国第 4 届脑血管病学术会议制定的脑卒中患者临床神经功能缺损程度评分（即 NIHSS）标准[8]：痊愈：临床症状消失，NIHSS 评分＜5；显效：临床症状明显好转，5＜NIHSS 评分＜15；有效：15＜NIHSS 评分＜20；无效：NIHSS 评分≥ 20。

1.5 血浆 FIB、D-D 含量测定

分别于治疗前、治疗 1 周、治疗 2 周，抽取患者的静脉血 5 mL，采用全自动血凝仪，利用磁珠法检测血浆中的 FIB、D-D 水平，所用试剂均为原装配套试剂。

1.6 统计学方法

采用统计学软件 SPSS19.0 进行统计学分析，计量资料采用 t 检验，计数资料采用卡方检验处理，以 P＜0.05 为差异显著，有统计学意义。

2 结果

2.1 两组患者的临床疗效比较

治疗后两组患者病情均有所改善，与对照组比较，实验组有效率明显较高，差异有统计学意义（P＜0.05），如表 1。

表 1 两组患者临床疗效比较情况（%）

Table 1 Comparison of the clinical efficacy(%)

Group	Case(n)	Recovery	Excellent	Effective	Invalid	Total efficiency(%)	x^2	P
Experiment	45	5	21	15	4	91.11△	52.63	0.034
Control	45	6	17	14	8	82.22		

Note: △P＜0.05, compared with control group.

2.2 治疗前后两组患者血浆中 FIB 含量比较

治疗后，两组患者血浆中 FIB 含量较治疗前均明显升高，差异有统计学意义（P＜0.05）；治疗 1 周、2 周后，与对照组比较，实验组血浆中 FIB 含量明显升高，差异有统计学意义（P＜0.05），如表 2。

2.3 治疗前后两组患者血浆中 D-D 含量比较

治疗后，实验组血浆中 D-D 含量较治疗前明显降低，差异有统计学意义（P＜0.05），对照组血浆中 D-D 含量较治疗前明显升高，差异有统计学意义（P＜0.05）；治疗 1 周、2 周后，与对照组比较，实验组血浆中 D-D 含量明显降低，差异有统计学意义（P＜0.05），如表 3。

表 2 治疗前后两组患者血浆中 FIB 含量比较情况（g/L，$\bar{x}$± s）

Table 2 Comparison of the levels of FIB in plasma (g/L，$\bar{x}$± s)

Group	Before treatment	One week after treatment	Two weeks after treatment
Experiment	3.11± 2.09	5.13± 1.28△*	5.25± 0.12△*
Control	3.08± 2.13	4.29± 1.64*	4.61± 1.53*

Note: △P<0.05, compared with control group;*P<0.05, compared with before treatment.

表 3 治疗前后两组患者血浆中 D-D 含量比较情况（μg/L，$\bar{x}$± s）

Table 3 Comparison of the content of D-D in plasma（μg/L，$\bar{x}$± s）

Group	Before treatment	One week after treatment	Two weeks after treatment
Experiment	3.24± 2.33	2.11± 1.37△*	0.36± 0.08△*
Control	3.19± 2.16	4.06± 1.75*	4.52± 1.49*

Note: △P<0.05, compared with control group;*P<0.05, compared with before treatment.

3 讨论

随着社会发展与人们生活方式的转变,加之老龄化社会进程的加快,脑血管疾病的发病率逐渐增高[9],其中脑出血占到40%左右,以其较高的致残率与致死率,严重影响人们的生活、生存质量,日益受到医学界的关注。在所有引起脑出血的原因中,高血压导致的壳核及内囊部位的出血是最常见的[10]。研究发现[11],高血压引起的急性脑出血往往存在纤溶系统活跃的现象,主要表现在 D- 二聚体与纤维蛋白原水平的变化。D- 二聚体是交联纤维蛋白凝块经纤溶酶溶解后产生的一种产物,可以作为纤溶过程的标记物[12]。有研究显示[13],高血压所致的脑出血患者,体内 D- 二聚体含量明显升高,可能与高血压引起的脑血管内皮细胞损伤,在局部形成血液凝结,反射性激活纤溶酶活性,溶解纤维蛋白有关;也有报道称[14],脑出血发生时,脑组织受损,向血液中释放大量组织因子,通过激活凝血因子Ⅵ,启动外源性凝血,促进纤维蛋白多聚体形成,导致继发性纤溶亢进,D- 二聚体含量升高。而纤维蛋白原是凝血因子Ⅰ,是形成血凝块的成分,研究称[15-18]高血压所致的脑出血患者体内纤维蛋白原含量增高,与机体出血后的代偿机制有关,血肿产生的凝血酶也有促进作用。

醒脑静是由安宫牛黄丸改制成的中药注射液,具有辛香走窜,醒脑开窍,活血通络之功效,现代药理研究也表明其能够改善脑细胞代谢、保护脑细胞、促进神经功能恢复、清除氧自由基等作用[19,20],但对脑出血患者凝血因子的的研究较少。本研究即通过观察治疗前后血浆纤维蛋白原、D- 二聚体水平以及临床疗效,来探究醒脑静对急性脑出血患者凝血功能的影响。

研究结果显示,治疗后两组患者病情均有所改善,实验组有效率(91.11%)与对照组(82.22%)比较明显较高,差异有统计学意义($P<0.05$),提示醒脑静注射液的应用能够明显提高脑出血患者的临床疗效;治疗后,两组患者血浆中 FIB 含量较治疗前均明显升高,差异有统计学意义($P<0.05$);治疗 1 周、2 周后,与对照组比较,实验组血浆中 FIB 含量明显升高,差异有统计学意义($P<0.05$),提示醒脑静注射液能够促进血浆中纤维蛋白的形成,促进血液凝结,加快止血进程;治疗后,实验组血浆中 D-D 含量较治疗前明显降低, 差异有统计学意义 ($P<0.05$),对照组血浆中 D-D 含量较治疗前明显升高,差异有统计学意义($P<0.05$);治疗 1 周、2 周后,与对照组比较,实验组血浆中 D-D 含量明显降低,差异有统计学意义($P<0.05$)。D-D 含量反应纤溶系统的活性,提示应用醒脑静注射液能够抑制纤溶系统活性,保证凝血过程的进行。

总之,醒脑静注射液能够使急性脑出血患者血浆纤维蛋白原含量增加,D- 二聚体水平下降,具有良好的临床疗效,值得进一步研究推广。

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