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丹红注射液治疗急性脑梗死的临床疗效分析*

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摘要 目的:探讨丹红注射液治疗急性脑梗死的临床疗效。**方法:**选择 2016 年 1 月至 2017 年 6 月来我院进行治疗急性脑梗死疾病患者 70 例作为本研究对象,采用随机数字表法均分为研究组和对照组。对照组采用常规抗血小板聚集、降低颅内压、营养脑细胞等治疗,研究组在对照组的基础上采用丹红注射液治疗,对比两组患者的疗效、治疗前后的神经功能缺损评分、日常生活活动能力评分、全血黏度和红细胞比积的变化。**结果:**治疗后,对照组患者的治疗有效率(82.86%)显著低于研究组(94.29%)($P<0.05$),研究组患者日常生活活动能力评分显著高于对照组($P<0.05$),神经功能缺损评分、全血黏度、红细胞比积均显著低于对照组($P<0.05$)。**结论:**丹红注射液用于治疗急性脑梗死可显著提高其临床疗效,明显提高患者日常生活能力,改善神经功能和血液流变学。

关键字:丹红注射液;急性脑梗死;神经功能缺损;临床疗效

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Clinical Efficacy of Danhong Injection in the Treatment of Acute Cerebral Infarction*

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ABSTRACT Objective: To investigate the clinical efficacy of danhong injection in the treatment of acute cerebral infarction. **Methods:** 70 cases of patients with acute cerebral infarction admitted in our hospital from January 2016 to June 2016 were selected as the research object and randomly divided into the research group and the control group with 35 cases in each group according to the digital random table method. The control group was given conventional treatment, including platelet aggregation and reduce intracranial pressure, nutrition brain cells, etc, while the research group was given danhong injection on the basis of control group, the curative effect, changes of nerve function defect grade, daily life activities ability score, whole blood viscosity and red blood cells were compared between two groups of patients before and after treatment. **Results:** After treatment, the treatment effective rate of control group was 82.86 %, which was significantly lower than that of the research group (94.29 %, $P<0.05$). The daily life activity score of research group was higher than that of the control group ($P>0.05$). while the neurological impairment score, blood viscosity and erythrocyte ratio were obviously lower than those of the control group ($P<0.05$). **Conclusions:** Danhong injection could remarkably enhance the clinical efficacy in the treatment of acute cerebral infarction, it could obviously enhance the daily living ability, improve the blood rheological index and nerve function.

Key words: Danhong injection; Acute cerebral infarction; Neurologic defect; Clinical curative effect

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前言

急性脑梗死是脑供血动脉粥样硬化或血栓引起脑血管狭窄、阻塞导致的脑缺血缺氧、供血不足而出现的神经功能缺损

的系列临床疾病^[1,2],具有发病急、发病程度高和致死率高等特征^[3]。随着我国人口老龄化的加剧,脑梗死的发病率逐渐提高。而脑梗死的发病机制较为复杂,目前在临床上以抗血小板聚集、降低颅内压、营养脑细胞治疗为主。

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活血化瘀药物是治疗急性脑梗死的主要方法之一,而活血化瘀药物品种较多,以中草药为主,包括脉络宁、丹参、舒血宁等^[4-7]。丹红注射液是红花、丹参的复方制剂,是近年来研制成的中药静脉制剂,研究显示其可以延长纤维蛋白血栓的形成时间,提高纤维蛋白溶解活性,具有调节脂质代谢、保护内皮、抑制炎症反应、通脉舒络等作用,同时可以较好地改善神经功能缺损程度^[8,9]。而目前关于丹红注射液治疗急性脑梗死临床疗效的研究较少^[10-12],因此,本研究选取 2016 年 1 月至 2017 年 6 月我院收治的急性脑梗死患者 70 例为研究对象,探讨了丹红注射液治疗急性脑梗死的临床疗效,具体结果报道如下。

1 资料与方法

1.1 一般资料

选择 2016 年 1 月至 2017 年 6 月来我院进行治疗的急性脑梗死患者 70 例为本研究的对象,采用随机数字表法均分为研究组和对照组,每组 35 例。所有患者均经影像学检查确诊为急性脑梗死,研究组患者年龄 34~76 岁,平均年龄为 49.32 ± 9.37 岁,平均病程(12.3 ± 3.4)h,既往合并心脏病 4 例,高血压 7 例,其他系统慢性疾病 5 例。对照组患者年龄 32~78 岁,平均年龄为 50.45 ± 9.56 岁,平均病程(12.1 ± 3.5)h,既往合并心脏病 5 例,高血压 7 例,其他系统慢性疾病 4 例。两组患者的年龄、既往病史等基本资料比较差异均无统计学意义($P>0.05$),具有可比性。

1.2 纳入标准

① 符合《中国急性缺血性脑卒中诊断指南》^[13]的相关规定;② 经影像学检查确诊为急性期脑梗死患者;③ 美国国立卫生研究院卒中量表(NIHSS)评分不低于 8 分;④ 患者和家属均自愿

签署知情同意书。

1.3 治疗方法

两组患者均接受常规治疗,包括降低颅内压、营养脑细胞、抗血小板聚集等治疗,研究组患者在此基础上给予丹红注射液治疗,使用 40 mL 溶于 0.9% 的氯化钠溶液 250 mL 中,采用静脉滴注的方式,糖尿病合并患者采用生理盐水稀释,每天 1 次,1 周为 1 个疗程,治疗 2 个疗程。

1.4 观察指标

① 疗效评价标准:痊愈:NIHSS 评分减少高于 90 %,病症特征消失,体征完全恢复;显效:NIHSS 评分减少在 45 %~90 %,体征基本恢复,病症特征基本消失,基本可以独立行走;有效:NIHSS 评分减少在 18 %~45 %之间,病症有所好转,体征部分得到恢复;无效:NIHSS 评分减少在 18 %以下,病症没有好转甚至出现恶化,体征没有明显恢复的迹象。治疗有效率 = [(痊愈 + 显效 + 有效) / 总例数] × 100 %。② 神经功能缺损程度评分采用 NIHSS 评分^[14],日常生活能力则采用日常生活能力量表的 ADL 评分^[15],所有调查在本院内采用调查问卷进行,现场记录收回量表。③ 全血黏度、红细胞比积。

1.5 统计学分析

采用 SPSS 19.0 软件进行数据分析,计量数据通过($\bar{x} \pm s$)形式进行表示,组间比较采用 t 检验,计数数据则通过(n,%)表示,组间比较采用 χ^2 比较,以 $P<0.05$ 为差异具有统计学意义。

2 结果

2.1 两组患者的临床疗效对比

治疗后,对照组患者的治疗有效率为 82.86%,显著低于研究组(94.29%),两组差异具有统计学意义($P<0.05$),见表 1。

表 1 两组患者的临床疗效对比(例,%)

Table 1 Comparison of the clinical efficacy between the two groups (n, %)

Groups	Cases	Healed(n,%)	Effective(n,%)	Valid(n,%)	Invalid(n,%)	Effective rate(%)
Control Group	35	12(34.29)	9(25.71)	8(22.86)	6(17.14)	82.86
Research group	35	16(45.72)	10(28.57)	7(20.00)	2(5.71)	94.29
P	-	-	-	-	-	<0.05

2.2 两组患者治疗前后的神经功能缺损评分和日常生活活动能力评分比较

两组患者治疗前的神经功能缺损评分和日常生活活动能

力评分对比差异均无统计学意义($P>0.05$);治疗后,研究组神经功能缺损评分明显低于对照组($P<0.05$),日常生活活动能力评分显著高于对照组($P<0.05$),见表 2。

表 2 两组患者治疗前后神经功能缺损评分、日常生活活动能力评分的对比($\bar{x} \pm s$)

Table 2 Comparison of the score of nerve function defect and daily activity ability score between two groups before and after treatment($\bar{x} \pm s$)

Groups	Cases	Neurological deficit score		Activities of daily activities	
		Before treatment	After treatment	Before treatment	After treatment
Control Group	35	16.62 ± 1.33	$9.78 \pm 1.02^{\circ}$	41.62 ± 8.45	$61.78 \pm 10.21^{\circ}$
Research group	35	16.21 ± 1.16	$5.56 \pm 0.87^{\circ}$	41.23 ± 8.32	$72.25 \pm 12.54^{\circ}$
P	-	>0.05	<0.05	>0.05	<0.05

Note: compared with before treatment, $^{\circ} P<0.05$.

2.3 两组患者治疗前后全血黏度、红细胞比积的对比

治疗前,两组患者全血黏度、红细胞比积对比差异均无统

计学意义($P>0.05$);治疗后,研究组患者全血黏度、红细胞比积均显著低于对照组($P<0.05$),见表 2。

表 3 两组患者治疗前后全血黏度、红细胞比积对比($\bar{x} \pm s$)

Table 3 Comparison of the total blood viscosity and erythrocyte ratio between two groups before and after treatment($\bar{x} \pm s$)

Groups	Cases	Total blood viscosity(mPa.s)		Erythrocyte ratio(%)	
		Before treatment	After treatment	Before treatment	After treatment
Control Group	35	8.67± 0.58	7.23± 0.61 [°]	50.17± 4.49	44.38± 4.15 [°]
Research group	35	8.68± 0.58	5.21± 0.49 [°]	50.51± 4.76	40.19± 2.77 [°]
P	-	>0.05	<0.05	>0.05	<0.05

Note: compared with before treatment, [°] P<0.05.

3 讨论

急性脑梗死的主要发病机制是脑动脉因血液在血管内自凝进入脑动脉而堵塞,导致脑组织缺血、缺氧,引起脑组织中心区发生坏死^[16],其治疗目前以改善血液循环、减轻脑细胞损伤为主^[17,18],包括抗血小板聚集、神经保护等^[19],整体疗效并不太乐观。

丹红注射液是为一种中药针剂,其主要成为是丹参、红花,丹参味苦^[20],红花味辛,二者均有通脉散瘀的作用,两种药物结合具有祛瘀生新、不伤正、活血通络的功效。药物的主要成分包括丹参酮、丹参酚酸和红花黄色素等^[21],丹参酮和丹参酚酸具有抗血小板聚集、抗氧化损伤、改善微循环、降低血浆水平的功能^[22,23],红花具有抑制血小板黏附、聚集的功能^[24,25],可以激活血管内皮细胞,促进 PGI2 的释放和失衡校正,以预防脑缺血再灌注损伤^[26]。本研究结果显示对照组患者治疗有效率(82.86 %)显著低于研究组患者(94.29 %),与欧阳征^[27]等研究结论一致,表明丹红注射液治疗可显著提高急性脑梗死的临床效果。

NIHSS 评分包含了 11 项神经功能内容评价,适用于各类脑血管疾病的评定。本研究采用 NIHSS 评分评价脑卒中患者的神经缺损程度,采用 ADL 量表评价患者的日常生活能力,结果显示:治疗后,研究组神经功能缺损评分较低于对照组,日常生活活动能力评分明显高于对照组,与高来顺^[28]等研究结论一致,表明丹红注射液对患者神经功能、日常生活活动能力的恢复具有明显促进作用,有利于提升患者生活质量。此外,本研究结果显示:治疗后,研究组患者全血黏度和红细胞比积的改善显著高于对照组,表明丹红注射液可以改善急性脑梗死患者的血液流变学,井文渠^[29]等的研究也表明丹红组红细胞聚集指数、全血黏度、红细胞比积、血浆黏度改善更显著,与本研究结论一致,表明丹红注射液能有效提高脑血流量和速度,增加受损区域的供血供氧,从而修复损伤的脑组织。

综上所述,丹红注射液用于治疗急性脑梗死可显著提高其临床疗效,明显提高患者日常生活能力,改善神经功能和血液流变学。

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