

电针对急性脑梗塞患者载脂蛋白的影响

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摘要 为了观察电针对急性脑梗塞(ACI)患者载脂蛋白的影响,将 120 例 ACI 患者随机分为观察组(电针加西药组)、对照组(西药组)各 60 例,治疗前后观察载脂蛋白 A_1 (Apo A_1)、载脂蛋白 B_{100} (Apo B_{100}) 的变化,并选 20 例体检健康者作为正常对照组。结果 ACI 患者 Apo A_1 显著降低 ($P < 0.01$), Apo B_{100} 显著升高 ($P < 0.01$),电针可显著升高 Apo A_1 水平 ($P < 0.05$),降低 Apo B_{100} 水平 ($P < 0.05$),并显著改善患者积分。

主题词 脑梗塞/针灸疗法 电针

脑梗塞属于中医学“中风”范畴,针灸治疗有着满意的疗效。笔者自 1998 年 10 月以来,将 120 例急性脑梗塞患者,按入院顺序随机分为观察组及对照组各 60 例,观察治疗前后载脂蛋白的变化及临床疗效,现报道如下。

1 临床资料

1.1 病例选择标准:中医诊断标准参照 1995 年国家中医药管理局脑病急症协作组制订的《中风病中医诊断与疗效评定标准》^[1],西医诊断标准参照 1995 年全国第四届脑血管病学术会议通过的《脑卒中患者临床神经功能缺损程度评分标准》^[2]。病例均为急性期病人,发病在 2 周以内,排除中、重度昏迷者,排除有合并脑疝形成、急性心肌梗塞、应激性消化道出血、严重糖尿病者。

1.2 一般资料:共选择病例 120 例,西医诊断为脑梗塞,并经头颅 CT 扫描证实,按入院顺序随机分为观察组和对照组。

观察组 60 例,男 34 例,女 26 例,年龄 67.13 ± 8.36 岁,既往史评分为 5.03 ± 2.63 分,并发症评分为 4.37 ± 2.28 分,起点积分为 15.68 ± 7.22 分。对照组 60 例,男 32 例,女 28 例,年龄 68.77 ± 11.81 岁,既往史评分为 5.60 ± 2.40 分,并发症评分为 4.90 ± 2.12 分,起点积分为 15.19 ± 6.14 分。经 χ^2 检验,两组患者性别差异无显著性 ($P > 0.05$),经 t 检验,两组患者年龄、既往史评分、并发症评分、起点积分差异无显著性 ($P > 0.05$),说明观察组、对照组一般情况差别无统计学意义,二者有可比性。

另选择正常对照组 20 例,为同期健康查体者,其中男 11 例,女 9 例,年龄 64.35 ± 10.64 岁。

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2 方法

2.1 治疗方法:观察组即电针加西药组。取穴:取患侧膻穴为主,Ⅰ组:内关、合谷、足三里、太冲;Ⅱ组:肩髃、尺泽、丰隆、三阴交;配穴:口角歪斜加颊车、地仓;失语、言语不利加廉泉、内关;眩晕加双侧肝俞。操作方法:两组穴位隔日交替应用,常规皮肤消毒,以 28~30 号 1~3 寸毫针常规刺入,得气后接通 G6805 治疗仪,选用连续波,强度为 1mA,频率为 160~180 次/分,留针 30 分钟,每天 1 次。西药:患者有颅内高压症状者,用 20%甘露醇 125ml 静脉滴注,每日 1~4 次,随颅内高压症状的缓解逐渐减量至停用;神经细胞保护剂给予脑复康(锦州华庆制药有限公司,辽卫药准字 1996 第 002997 号)4~6g 静脉滴注,每日 1 次,脑复素(吉林新星药业有限公司,吉卫药准字 1996 第 130011 号)20~40ml 静脉滴注,每日 1 次,脑组织液(抚顺汇龙达药业有限公司,卫药准字 X-256-2 号)20ml 静脉滴注,每日 1 次;防治感染,给予头孢类或喹诺酮类抗生素;同时给予对症支持治疗。

对照组西药剂量、用法与观察组相同。

以上两组均治疗 20 天。

正常对照组只采血检测 Apo A_1 、Apo B_{100} ,不进行电针及其他治疗处理。

2.2 观察指标:患者治疗前评分 1 次,于住院后第 2 日清晨空腹抽取肘静脉血 2ml,检测载脂蛋白 A_1 (Apo A_1)、载脂蛋白 B_{100} (Apo B_{100}),治疗 20 天后再次评分及检测指标,评价疗效。用日本 OLYMPUS AU 560 型全自动生化分析仪自动免疫比浊法测定血清 Apo A_1 、Apo B_{100} 的浓度,测 Apo A_1 时血清用 1 μ l,测 Apo B_{100} 时血清用 4 μ l,试剂盒由上海明华体外诊断试剂有限公司提供。

2.3 统计学方法:计数资料用 χ^2 检验、Ridit 分析,计量资料以均数 $\pm$ 标准差($\bar{x} \pm s$)表示,采用 t 检验。

3 结果

3.1 疗效标准:疗效评价根据《中风病中医诊断与疗效评定标准》^[1]评定。治疗前评分与治疗后评分百分数折算:(治疗前评分-治疗后评分)/治疗前评分 $\times$ 100%。基本恢复: $\geq 81\%$,6 分以下;显著进步: $\geq 56\%$, $< 81\%$;进步: $\geq 11\%$, $< 56\%$;无变化: $< 11\%$ 。

3.2 治疗结果:观察组、对照组治疗前后与正常对照

附表 两组治疗前后 ApoA₁、ApoB₁₀₀含量及积分比较($\bar{x} \pm s$)

组别	例数		ApoA ₁ (g/L)	ApoB ₁₀₀ (g/L)	积分
观察组	60	治疗前	0.943±0.122	1.313±0.141	15.68±7.22
		治疗后	1.417±0.154* [△]	0.917±0.123* [△]	4.62±1.97* [△]
对照组	60	治疗前	0.923±0.128 [▲]	1.293±0.134 [▲]	15.19±6.14
		治疗后	1.213±0.141*	1.130±0.118*	8.13±2.36*
正常对照组	20		1.415±0.168	1.005±0.211	

与本组治疗前比较, * $P < 0.01$; 与对照组治疗后比较, $\Delta P < 0.05$; 与正常对照组比较, $\Delta P < 0.01$

组 ApoA₁、ApoB₁₀₀ 的比较及观察组、对照组治疗前后积分比较, 见附表。

经 t 检验, 治疗前脑梗塞患者的 ApoA₁ 含量极显著低于正常对照组 ($P < 0.01$), ApoB₁₀₀ 含量极显著高于正常对照组 ($P < 0.01$), 所检测指标观察组与对照组之间无显著性差异 ($P > 0.05$)。治疗后, 两组患者 ApoA₁ 显著上升 ($P < 0.01$), ApoB₁₀₀ 显著下降 ($P < 0.01$), 但观察组优于对照组 ($P < 0.05$), 观察组 ApoA₁、ApoB₁₀₀ 已恢复至正常水平 ($P > 0.05$), 而对照组虽与治疗前有显著性差异, 但仍未恢复至正常水平 ($P < 0.05$)。由附表可见, 治疗前观察组与对照组积分无显著性差异 ($P > 0.05$), 治疗后两组积分均较治疗前明显降低 ($P < 0.01$), 且观察组较对照组改善明显 ($P < 0.05$)。

3.3 临床疗效: 观察组 60 例, 基本恢复 18 例 (30%), 显著进步 30 例 (50%), 进步 10 例 (16.7%), 无变化 2 例 (3.3%)。对照组 60 例, 基本恢复 8 例 (13.3%), 显著进步 18 例 (30.0%), 进步、稍进步 26 例 (43.3%), 无变化 8 例 (13.4%)。经 $Ridit$ 分析, 观察组疗效优于对照组 ($P < 0.05$)。

4 讨论

脑梗塞属于中医学“中风”范畴, 是在气血内虚基础上, 遇有劳倦内伤, 忧思恼怒, 嗜食厚味、烟酒等诱因, 进而引起脏腑阴阳失调, 气血逆乱, 直冲犯脑, 形成脑脉痹阻^[3]。清·王清任认为, “元气既虚, 必不能达于血管, 血管无气, 必停留而瘀”, 立“气虚血瘀”论, 创补阳还五汤治之。有人认为本病系气虚血滞, 挟痰挟湿, 阻滞脑络、脉络而致^[4]。

现代研究表明, 载脂蛋白是脂蛋白中特异性蛋白质, 在很大程度上决定脂蛋白的生物学和免疫学特性。ApoA₁ 可将血浆中卵磷脂胆固醇酯酰基转移酶 (LCAT) 激活, 使血浆中非酯化胆固醇代谢转变为酯化胆固醇, ApoA₁ 还在促进高密度脂蛋白胆固醇 (HDL-C) 成熟的过程中起极为重要的作用, 而且 ApoA₁ 可与 HDL₃ 可逆结合, 以完成胆固醇从外周组织转移到肝脏, 起到拮抗动脉粥样硬化的作用^[5]。ApoB₁₀₀ 由肝脏

合成, 是低密度脂蛋白 (LDL) 的主要结构蛋白质, 可促进 LDL 在动脉壁内沉积, 加速动脉粥样硬化的形成^[6]。本研究结果显示, 脑梗塞患者 ApoA₁ 明显降低, ApoB₁₀₀ 明显上升, 随着病情好转, ApoA₁、ApoB₁₀₀ 渐趋于正常, 与上述研究结果相符, 电针配合西药治疗对载脂蛋白的影响及临床疗效比单纯西药治疗要好, 表明电针具有显著改善脑梗塞患者载脂蛋白的作用。

总结该病发病病机, 在于本虚标实, 血瘀脉中, 本虚为气血阴阳不足, 标实为风、火、痰、瘀夹杂致病, 虚可致瘀, 风、火、气、痰阻滞脉络, 均可造成血瘀, 治疗宜活血化瘀, 调整虚实。阳明为多气多血之经, 可疏通气血, “血行风自灭”, 又因阳明为“五脏六腑之海, 主润宗筋”, 可调节脾胃功能, 阳明气血通畅, 正气旺盛, 利于康复, 故取手足阳明经腧穴肩髃、丰隆、足三里、合谷可活血化瘀, 扶正祛邪, 调整虚实。而本病是在阴阳失调的基础上发生的, 因此配用阴经腧穴, 调合阴阳。尺泽为肺经合穴, 可滋阴生液。内关为八脉交会穴、心包经之络穴, 可养心安神, 疏通气血。三阴交系肝、脾、肾三经交会穴, 有补肾滋阴, 生髓益脑的功能。太冲为足厥阴肝经原穴, 主调血, 能平肝通络, 清肝泄火; 合谷为手阳明大肠经原穴, 主调气, 两者配合, 具祛风开窍、行气活血、通经活络之功。

本研究提示, 电针通过升高 ApoA₁ 水平, 降低 ApoB₁₀₀ 水平, 改善脑梗塞患者胆固醇在血管壁的堆积, 可能是其活血化瘀、调整虚实的机理之一。

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ABSTRACTS FROM ORIGINAL ARTICLES

Effects of Electroacupuncture on Apoproteins in the Patient of Acute Cerebral Infarction

Wang Chengyin, Wang Wenying

In order to observe effect of electroacupuncture (EA) on apoproteins in the patient of acute cerebral infarction (ACI), 120 cases were randomly assigned to observation group (EA plus Western medicine group, $n = 60$) and control group (Western medicine group, $n = 60$). The changes of apoprotein A₁ (ApoA₁) and apoprotein B₁₀₀ (ApoB₁₀₀) before and after treatment were investigated, and 20 healthy persons were used as normal control group. Results indicated that ApoA₁ lowered significantly ($P < 0.01$) and ApoB₁₀₀ increased ($P < 0.01$) in the patient of ACI; EA could raised significantly ApoA₁ ($P < 0.05$) and decreased ApoB₁₀₀ ($P < 0.05$), and improved significantly the cumulative score of the patient, suggesting that EA can improves significantly apoprotein levels in the patient of ACI and has a better clinical therapeutic effect.

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Key words: cerebral infarction/acup — mox therapy electroacupuncture

(Original article on page 409)

Effects of Du Su Qing on Humoral Immunity and Subgroups of T—Lymphocytes in the Patient of Senile Bacterial Pneumonia

Li Jiansheng, Cheng Long, Li Suyun, et al.

For assessing clinical therapeutic effect of Du Su Qing on senile bacterial pneumonia (accumulation of phlegm and heat in the lung, deficiency of both Qi and Yin), senile patients of pneumonia on the basis of routine treatment of Western medicines were randomly divided into treatment group (treated with Du Su Qing Oral Liquid) and control group (treated routinely with Western medicines), and the healthy old people were used as healthy senile group. Changes of IgA, IgG, IgM, C₃, C₄, and CD₃, CD₄, CD₈ and their ratio in the peripheral blood before and after treatment were investigated. Results indicated that of 33 cases in the treatment group, 10 cases were cured, 16 markedly effective, 5 improved, the effective rate being 93.93%; of 31 cases in the control group, corresponding figures were 5, 6, 15, and 83.87%, with a significant difference between the two groups in therapeutic effect. The levels of IgA, IgG, C₃ and CD₈ (%) in the senile patients of pneumonia were significantly higher than those in the healthy senile group, and after treatment they, except C₄, in the treatment group were improved, which were superior to those in the control group. It is suggested that combination of Du Su Qing with routine treatment of Western medicines has a significant therapeutic effect and the mechanisms may be: (1) decreasing the increased IgA, IgG, IgM and C₃ levels; (2) increasing the decreased CD₃ (%) and CD₄ (%), decreasing the increased CD₈

(%), leading balance of CD₄ and CD₈.

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Key words: pneumonia, bacterial/TCM therapy @Du Su Qing Oral Liquid

(Original article on page 411)

Clinical and Experimental Studies on Gan Bao Chong Ji Antagonising Hepatic Fibrosis in the Patient of Hepatitis B

Pan Xuefei, Zhang Changfa, Liu Yingna, et al.

One hundred and five cases of chronic hepatitis B were treated with Gan Bao Chong Ji, with a total effective rate of 90.48% and the effective rate in the control group was 78.57%, with a significant difference between the two groups ($P < 0.05$). The recovery normal rate, recovery normal time and the stable rate of alanine aminotransferase (ALT), and HBeAg and DNA turning negative rate all were superior to those in the control group. Experiments in the animal indicated that Gan Bao Chong Ji had a significant action of antagonising hepatic fibrosis in rats. It is suggested that Gan Bao Chong Ji has a better effect of protecting the liver and decreasing ALT in treatment of chronic hepatitis B and can improve hepatic fibrosis.

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Key words: hepatitis, type B/TCM therapy hepatocirrhosis/TCM therapy @Gan Bao Chong Ji

(Original article on page 415)

Clinical Observation on 29 Cases of HIV Infection and AIDS Treated with Zhong Yan No. 2

Wang Jian, Yu Zhimin, Li Guoqin, et al.

All patients were treated with Zhong Yan No. 2 Prescription, 3 months constituting one course. Indexes of immunologic functions before and after treatment were compared and HIV—Rt—PCR detection was made in 16 cases. Results indicated that in absolute number of CD₄, 8 cases increased, 14 cases decreased and 7 cases did not change; in CD₄/CD₈ ratio, 2 cases increased, one case decreased and 16 cases did not change; Two cases had increase of both CD₄ and CD₄/CD₈ ratio; 4 cases had a decrease of new pterin, 11 cases increased and one case no change; 6 cases had a decrease of HIV—Rt—PCR, 8 cases increased and 2 cases no change. The total effective rate was 48.28% based on comprehensive assessment of virus, immunity, body weight and symptoms.

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Key words: Acquired Immunodeficiency Syndrome (AIDS)/TCM therapy @ Zhong Yan No. 2 Formula

(Original article on page 418)