

高血压病气功、慢跑、药物治疗对比分析

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内容提要 高血压病 117 例随机分为三组治疗, 气功组 39 例, 慢跑组 42 例, 药物组 36 例。经一年观察, 三组均有降压疗效, 总有效率分别为 89.74%、92.86% 和 86.11%。气功组及慢跑组同时有减轻体重, 降低总胆固醇和甘油三酯的作用, 其下降率分别为 3.89%、4.63%; 15.03%、11.79% 和 14.59%、13.30%。药物组体重无明显变化, 而总胆固醇及甘油三酯分别增高 4.13% 及 3.91%。提示气功或慢跑疗法对高血压有明显疗效, 值得进一步研究和探讨。

为了进一步探讨非药物治疗对高血压病的疗效, 近几年来我们对 117 例原发性高血压病患者分别用气功、慢跑、药物治疗进行了一年对比研究, 现将结果报告如下。

临床资料

全部病例均为男性, 随机分为三组: 气功组 39 例, 年龄 51~69 岁, 平均 56.31 岁; 病程 1~26 年, 平均 7.97 年; 高血压病 I 期 9 例, II 期 28 例, III 期 2 例。慢跑组 42 例, 年龄 46~69 岁, 平均 55.52 岁; 病程 1~32 年, 平均 7.23 年; 高血压病 I 期 10 例, II 期 32 例。药物组 36 例, 年龄 46~62 岁, 平均 53.17 岁; 病程 1~27 年, 平均 6.94 年; 高血压病 I 期 8 例, II 期 28 例。治疗前各组血压水平见表 1。高血压病的诊断、分期、疗效评定及观察方法均按 1974 年全国冠心病、高血压病普查预防座谈会修订标准执行^①。注意排除症状性高血压。

治疗方法

一、气功组: 由北京市气功学会郭林气功师讲授和辅导。总的要求是全身放松, 调整呼吸, 排除杂念, 意守丹田, 达到入静。牢记“圆、软、远”, 掌握“意、气、形”。练功方式

以行功为主, 以松静站立、升降开合、慢步行功为重点^②。每天练功两次, 每次 0.5~1 小时。

二、慢跑组: 根据循序渐进的原则, 在医生监督和指导下, 逐渐增加运动负荷。开始第 3~4 周及第 7~8 周调整两次运动量。一般运动量是每天 4000~5000m, 每千米要在 7~8 分钟左右跑完。每天慢跑一次, 每次约 1 小时左右。注意慢跑前的准备活动及慢跑后的整理活动, 以防发生运动损伤或其他意外。

三、药物组: 用常规药物治疗^③。开始口服常规剂量, 每天 3 次。3 个月为一疗程, 调整一次治疗方法, 包括增减药品种及剂量。主要使用的药物有降压 0 号、降压 I 号、降压 II 号、复方降压片及自拟的降压 III 号和双氢氯噻嗪、心得安、利血平、血压达静、胍乙啶、可乐宁等。本组未用哌唑嗪、氨酰心安及中药。

三组均以一年为限, 中途改变疗法或疗程不及一年者不列入本文。

结 果

一、总疗效比较: 本文 117 例显效 61 例 (52.14%), 有效 44 例 (37.61%), 无效 12 例 (10.26%), 总有效率 89.75%。其中气功组显效 51.28% (20/39), 有效 38.46% (15/39), 无效 10.26% (4/39), 总有效率 89.74%。慢跑组显

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效 54.76% (23/42), 有效 38.10% (16/42), 无效 7.14% (3/42), 总有效率 92.86%。药物组显效 50% (18/36), 有效 36.11% (13/36), 无效 13.89% (5/36), 总有效率 86.11%。各组总有效率经统计学处理无显著差异 ($H=3.66$, $P>0.05$), 说明各组疗效相似。

二、降压疗效比较: 117 例收缩压下降 20.76 ± 14.24 mmHg, 舒张压下降 17.13 ± 11.21 mmHg。各组治疗前后比较 P 均 <0.01 , 说明各组均有降压疗效。各组间治疗前后比较 P 均 >0.05 , 说明各组间降压疗效无明显差异。详见表 1。

表 1 各组降压疗效比较 ($M \pm SD$)

	收缩压(mmHg)		舒张压(mmHg)	
	治疗前	治疗后	治疗前	治疗后
气功组	169.69	150.00	104.32	88.08
n=39	± 18.60	± 17.35	± 15.15	± 5.52
慢跑组	166.19	141.88	107.07	87.76
n=42	± 19.41	± 12.83	± 15.99	± 7.19
药物组	168.67	150.67	109.75	94.72
n=36	± 20.44	± 17.38	± 11.08	± 7.02

三、各组体重变化比较: 气功组体重平均下降 2.91 kg, 慢跑组平均下降 3.33 kg, 与治疗前比较分别下降了 3.89% 及 4.63%, 经统计学处理 $P<0.01$ 。药物组体重平均下降 0.32 kg, 治疗前后无显著差异 ($P>0.05$)。气功组、慢跑组及药物组治疗前超重人数分别为 22、29 和 26 例, 治疗后仍超重的各为 11、15 及 24 例。治疗前后比较各组分别减少了 50%、48.28% 及 7.69%, 说明气功组及慢跑组还有减轻体重的作用, 见表 2。

表 2 各组治疗前后体重变化 ($M \pm SD$)

	例数	体 重 (kg)		P 值
		治疗前	治疗后	
气功组	39	74.86 ± 7.02	71.95 ± 6.59	<0.01
慢跑组	42	71.95 ± 6.94	68.62 ± 6.14	<0.01
药物组	36	75.45 ± 8.69	75.13 ± 8.10	>0.05

四、治疗前后血脂变化比较: β 脂蛋白 (mg%), 总胆固醇 (mg%) 及甘油三酯 (mg%), 气功组治疗后分别下降 56.79、36.70 及 22.82

($P<0.01$)。慢跑组分别下降 55.31、28.88 及 20.74 ($P<0.01$)。两组总胆固醇及甘油三酯的下降率分别为 15.03%、11.79% 及 14.59%、13.30%。而药物组三种血脂分别上升 24.94、10.00 及 6.42, 总胆固醇及甘油三酯上升率为 4.13% 及 3.91%。详见表 3。

表 3 各组治疗前后血脂变化对比 ($M \pm SD$)

	β 脂蛋白 (mg%)	总胆固醇 (mg%)	甘油三酯 (mg%)	P 值
气功组 (n=39)	治疗前	631.97	244.18	156.44
		± 153.90	± 37.54	± 46.32
	治疗后	575.18	207.48	133.62
		± 88.01	± 30.91	± 28.37
慢跑组 (n=42)	治疗前	589.36	245.00	155.91
		± 117.91	± 44.98	± 51.11
	治疗后	534.05	216.12	135.17
		± 69.94	± 26.66	± 23.21
药物组 (n=36)	治疗前	642.03	242.22	164.11
		± 61.32	± 41.94	± 54.03
	治疗后	666.97	252.22	170.53
		± 101.25	± 31.59	± 38.91

*t 检验分别为 4.2、6.49、5.45; **t 检验分别为 4.59、4.95、3.96; ***t 检验分别为 2.02、2.02、1.04

讨 论

气功具有医疗保健功能, 经济有效, 简便易行, 邱氏^(3~8)从 1959 年以来坚持研究气功治疗高血压, 取得了显著成绩。本文用气功治疗高血压病 39 例, 一年的总有效率为 89.74%。同时观察到, 气功不仅降压效果显著, 而且疗效稳定, 血压 (尤其舒张压) 降至正常以后很少发生波动。因而气功疗法的疗效较药物疗法更巩固。此外气功能使患者心情舒畅, 食欲增加; 还能减轻体重, 降低血脂; 对合并冠心病、糖尿病也有一定的治疗作用。我们认为气功的疗效与 (1) 能否坚持练功, 以及每日练功时间长短; (2) 能否使肌肉放松; (3) 能否正确调整呼吸, 达到入静等因素有关。

本文慢跑疗法治疗高血压病不仅能降低血压, 明显改善症状, 且能减轻体重、降低血脂。Kiyonaga 等⁽⁹⁾观察体育锻炼后, 出现血清儿茶酚胺明显降低, 血清前列腺素 E 水平明显增高。并且认为交感活性降低和前列腺素 E 水平

增高可能是参与高血压运动疗法降压反应的基本机理。慢跑虽是治疗高血压病的良好的非药物疗法,但慢跑运动量大,要审慎选择适应症。我们体会必须注意:(1)患者经体检合格后,在医生指导和监督下进行慢跑。(2)慢跑前要做准备活动,慢跑后要做整理活动。(3)运动量必须采取循序渐进的原则。(4)要持之以恒。(5)根据患者的个体差异,不断调整运动强度,找出适合患者的最佳锻炼方案。(6)运动后15分钟脉搏应恢复到运动前水平,由患者自己测量。

气功及慢跑能使总胆固醇及甘油三酯水平降低和体重减轻的意义值得探讨。高血压、吸烟和血脂异常是冠心病和其他血管硬化的三大主要危险因素⁽¹⁰⁾。因之,血压恢复正常,纠正血脂异常和减轻超重的体重无疑有助于减少动脉粥样硬化的危险因素。我们考虑气功及慢跑的疗效还与调整大脑皮层高级神经活动、内分泌体液、植物神经功能以及肌肉血管多种因素有关。其确切机理尚需进一步研究。

(北京市气功学会理事郭林气功师亲自讲授并辅导气功疗法,特此致谢)

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中国中西医结合研究会耳鼻喉科专业委员会成立 暨第二次学术会议召开

本次会议于1987年5月5~9日在天津市召开。中国中西医结合研究会吴威中副理事长、吕维柏秘书长、天津市卫生局赵藕善副局长、中华医学会天津分会主任阎承先教授等到会祝贺。与会代表110人, 来自20个省市。会议收到论文240篇, 大会交流30篇, 分组交流81篇, 每篇论文报告后都开展了质疑、答辩、讨论, 气氛活跃。论文涉及面广, 在质量方面比上届有所提高, 并且有10%的论文开始涉及基础研究, 包括医学气象学、分子生物学、免疫学等方面, 尤其是过敏性鼻炎、眩晕、鼻窦炎、恶性肉芽肿等疾病的治疗及免疫学检查, 血浆cAMP、cGMP含量的观察, 血清乙酰胆碱酶活性的测定等, 都显示了耳鼻喉科领域的中西医结合工作的进展。

大会还邀请了吴威中教授和访问学者许淑研究

员, 分别作了“中西医结合研究的思路与方法”和“关于听力检查的评价”的报告。

专业委员会由13人组成, 大会期间召开了第一届专业委员会, 一致推举北京友谊医院杨和钧为主任委员, 林文森、赵应时为副主任委员, 田平忠任秘书。专业委员会挂靠单位为北京友谊医院。大会确定了今后的工作计划, (1)明、后年分别召开过敏性鼻炎、眩晕专业会议。(2)今年10月在安徽举办第二届耳鼻喉科中西医学习班, 以普及为主, 并讨论中西医结合研究的思路与方法。(3)今年创刊《中西医结合耳鼻喉科通讯》, 内部发行。(4)希望有条件的地方与当地中西医结合分会协商成立中西医结合研究会耳鼻喉科分会。(5)定于1990年召开第三届学术会议。

(刘海洋)

Controlled Study of Qigong (气功), Jogging and Drug Therapy on Essential Hypertension

Lü Zhenchun (吕增春), et al

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In this survey, 117 patients with mild to moderate essential hypertension were divided randomly into three groups: 39 patients in Qigong (breathing exercise) group, 42 in jogging group and 36 in drug therapy group as control. The efficacy of blood pressure was evaluated after treatment for one year. 51.28 %, 54.76 % and 50 % were marked effective in corresponding group; 38.46 %, 38.10 % and 36.11 % were effective; 10.26 %, 7.14 % and 13.89 % were ineffective respectively. Body weight loss was 2.91 kg and 3.33 kg in all hypertensive patients of both Qigong and jogging group. However, in drug therapy group, the weight was not significantly reduced. The plasma total cholesterol decreased 15.03 % and 14.59 % and triglycerides lowered 11.79 % and 13.30 % in Qigong and jogging group respectively. While in the drug therapy group, the total cholesterol and triglycerides levels in plasma increased 4.13 % and 3.19 % respectively. It is suggested that the effectiveness of Qigong and jogging in decreasing the blood pressure should be studied further.

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Clinical and Experimental Observation of Qigong (气功) Therapy for Postoperative Malignant Tumor of GI Tract

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This article reports multiparameter such as fibronectin, WBC count, factor VIII related antigen, immunologic reaction, cancer embryonic antigen (CEA) and the tongue picture were used to observe their changes before and after Qigong exercises. All of the cases were pathologically confirmed GI tract malignant tumor patients with lymphatic metastasis who received surgical operations. Most of their CEA value were higher than 15 ng/ml (normal value <15 ng/ml). Number of cases were 31, male 19, female 12. After Qigong exercise their serum fibronectin and WBC count increased, $P < 0.001$ and $P < 0.05$ respectively. The tongue picture also had some changes, part of the yellow slimy coating evolved into white slimy or white thin coating, the signs of blood stasis in tongue also improved somewhat, but immunologic reaction and CEA remained stable and unchanged such as the rate of lymphoblastic transformation, IgG, IgA, IgM, etc. ($P > 0.05$). The results of the above mentioned examinations revealed that Qigong exercises was beneficial to the GI malignant tumor patients. Because only over two months training was performed, a longer follow up is necessary, so that the CEA and other parameters may improve. The importance of Qigong meditation was discussed. It was conceived that the Qigong meditation could reach a "Qigong Status", which caused the plasma cortisol decrease. In Qigong Status, the function of protective inhibition of the brain enhanced. Qigong exercise could also dredge the channel system, harmonize Qi (气) and blood and strengthen the function of nonspecific resistance against diseases.

(Original article on page 465)

Study on Effect of Acupuncture on Serum High Density Lipoprotein Cholesterol in Cerebral Infarction Patients

Qi Liyi (戚丽宜), et al

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46 cases of in patients with cerebral infarction were treated with acupuncture. The basic cure rate was 43.4 % and total effective rate 89.13 %. Moreover, 8 indices of serum lipoprotein cholesterol were measured: (1) Total cholesterol (TC), (2) Triglycerides (TG), (3) β -lipoprotein, (4) High density lipoprotein cholesterol (HDL-C), (5) Low density lipoprotein cholesterol (LDL-C), (6) HDL-C/TC ratio, (7) HDL-C/LDL-C ratio, (8) Atherosclerosis index (AI). Results: The mean value of serum HDL-C was 41.71 ± 4.33 mg/dl which was much lower than that of 28 normal subjects (52.8 ± 8.68), $P < 0.01$. But TC (205.58 ± 29.29 , $n=46$) and β -lipoprotein (447.83 ± 147.68 , $n=46$) were much higher than that of normal subjects (169.30 ± 27.64 , $n=36$ and 370.31 ± 51.21 , $n=20$), both $P < 0.01$. It showed that the decrease of serum HDL-C lowered the ability of transportation of cholesterol to liver from the wall of artery or tissue cells, and in turn, lowered the ability of degradation of cholesterol, all these were closely related to the formation of cerebral infarction and were considered as one of the risk factors of cerebral infarction. After 45 days of acupuncture therapy the serum HDL-C increased from 41.71 ± 4.33 to 43.59 ± 4.14 , $P < 0.01$. The ratio of HDL-C/TC and HDL-C/LDL-C elevated correspondingly, $P < 0.01$. But β -lipoprotein decreased from 447.83 ± 147.68 to 433.38 ± 112.79 , $P < 0.01$. Thereby AI reduced from 3.98 ± 0.99 to 3.74 ± 0.92 , $P < 0.01$. There was significant difference between the pre- and post-treatment, $P < 0.01$.

After acupuncture the transportation ability of cholesterol was enhanced. It denoted that acupuncture not only influenced the metabolism of serum lipoprotein but regulated its ratio also. It played an important role in prevention against cerebral infarction and in rehabilitation. The level of serum HDL-C of the patients with lesion in basic ganglions was obviously lower than that of the lesion in the cortex, $P < 0.01$. There was no significant difference of serum HDL-C between the patients of cerebral haemorrhage and infarction.

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