

长生降压液对中老年肾虚型高血压病及心肌肥厚影响的临床观察

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内容提要 本文对补肾立法的纯中药制剂长生降压液的临床观察表明,该药可使中老年肾虚型高血压病患者的卧位收缩压、舒张压及平均动脉压明显下降($P<0.001$),并能明显缓解高血压病及肾虚症状。同时,该药可使治疗组的左室质量指数由治疗前的 $114.75\pm42.40\text{g}/\text{m}^2$ 减少为治疗12周后的 $100.39\pm30.08\text{g}/\text{m}^2$ 。而对照药罗布麻叶口服液虽亦有降压效果,但未能发现有逆转高血压性左室肥厚的效应。

关键词 长生降压液 高血压病 心肌肥厚

鉴于传统的西药降压药对血液生化、脂类代谢及心理和行为尚存在一些程度不等的副作用,探索中药治疗高血压病是一项很有价值的工作。我们于1988~1989年以纯中药制剂治疗中老年肾虚型高血压病65例,探索补肾法在高血压病中的治疗作用,并观察中药对高血压性左室肥厚的逆转作用。

资料和方法

一、观察对象

1. 门诊选择 ≥ 45 岁的患者,测非同日血压两次。测压前静卧30min。凡两次卧位血压均符合1978年WHO所定之高血压标准者,经常询问病史和体检,行血肌酐、尿常规、心电图、胸片、眼底检查及超声心动图检查,并辅以必要的实验室检查,剔除Ⅲ期高血压病及收缩压 $>29.3\text{kPa}$ (220mmHg)及/或舒张压 $>15.3\text{kPa}$ (115mmHg)者。排除继发性高血压及合并心衰、肾衰、眼底出血、慢性严重肺疾患、肝功能不全、痛风、6个月内发作的缺血性心脏病、严重心律失常及其它需特殊治疗的疾病者。

2. 符合中国中西医结合研究会虚证与老年病研究专业委员会1986年郑州会议制定的肾虚证诊断标准者。

3. 若两周内曾服用降压药者,至少须停药两周。

同时符合上述三条者,征得本人同意后,纳入观察范围。

观察对象先按性别、年龄及病情轻重分层,然后各层再随机分为治疗组和对照组。治疗组34例,男16例,女18例。平均年龄 55.8 ± 6.9 岁。病程:1~29年,平均 11.3 ± 7.8 年。Ⅰ期7例,Ⅱ期27例。对照组31例,男13例,女18例,平均年龄 55.4 ± 7.1 岁。病程:1~30年,平均 10.7 ± 9.1 年。Ⅰ期8例,Ⅱ期23例。

二、方法: 长生降压液由枸杞子、杜仲、生地、肉苁蓉、牛膝等药物组成,每支10ml,相当于生药10g。罗布麻叶口服液,每支10ml,相当于生药5g。两种药物均由辽宁省西丰中药厂制备,其外观性状相似。

治疗组服长生降压液,对照组服罗布麻口服液。两组患者均为每次10ml,每日2次,连续服用3个月。服药期间停服其它药物,饮食及生活习惯依旧。

三、观察方法

1. 血压: 患者间隔2周复查1次卧位血压。以治疗前2次血压的均值作为观察血压,以第4周末及第12周末的血压作为疗效评定血压。疗效判定采用血压达标率作为指标。目标血压:(1)收缩压 $<21.3\text{kPa}$ (160mmHg),或下降值 $\geq 2.7\text{kPa}$ (20mmHg)。或(2)舒张压 $<$

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12kPa(90mmHg), 或下降值 $\geq 1.3kPa(10mmHg)$ 。

2. 高血压病常见症状：选择高血压病常见症状共20项：头痛、头晕、耳鸣、视物模糊、健忘、注意力不集中、失眠、多梦、急躁、恶心、心悸、气喘、烦闷、口干、腰痠痛、肢体麻木、乏力、项强、多尿、夜尿。于治疗前、治疗后第4周末及第12周末逐项询问并记录。其记分方法和疗效评定标准参考第三次全国中医、中西医结合老年医学研究协作会议通过的“延缓衰老中药的筛选规程和临床观察规范”进行评定。

3. 肾虚证常见症状：选择近期较易观察出变化者共18项：头晕、目昏、疲倦、耳鸣、耳聋、腰痠痛、膝痠软、足心(跟)痛、气促息短、五更泄、腰以下肿、健忘、畏寒、肢冷、尿失禁、尿有余沥、夜尿频多、善恐。观察及记分方法和疗效评定方法同上。

4. 超声心动图观察：采用日本Aloka SSD-110S型超声诊断仪。探头频率2.25MHz，扫描速度25mm/s。采用立拍立现摄影机拍照后测量。测量指标：左室内径及室壁厚度按Penn常规测量⁽¹⁾。各指标连续测量3个心动周期，取均值作为最后结果。测量身高和体重，按Stevenson公式计算体表面积⁽²⁾。计算公式：先按Devereux公式计算出左室质量(Left Ventricular Mass, 以下简称LVmass)⁽¹⁾，

$LVmass(g) = 1.04[(Dd + IVST + PWT)^3 - Dd^3] - 13.6$ (其中Dd为左室舒张末内径，IVST为室间隔厚度，PWT为左室后壁厚度)。然后根据下述公式计算出左室质量指数(Left Ventricular Mass Index, 以下简称LVMIndex)，

$$LVMIndex(g/m^2) = LVmass / \text{体表面积}$$

结 果

一、治疗前后两组血压的比较：见表1。

从表1中可以看出，经过4周及12周的治疗，两组的血压均有较明显的下降。治疗组卧位收缩压和平均动脉压的下降较对照组为多，两组有显著性差异， $P < 0.01$ 。舒张压下降上两

表1 两组治疗前后卧位血压的比较(kPa, $\bar{x} \pm S$)

组 别	收 缩 压	舒 张 压	平 均 动 脉 压
治 前	22.8 ± 2.1	13.5 ± 0.8	16.5 ± 0.9
治疗(34)	4周 治 20.4 ± 1.6*	12.4 ± 0.9*	15.1 ± 0.9*
	后 12周	20.1 ± 1.9*	12.4 ± 0.8*
			14.9 ± 1.1*
治 前	23.1 ± 2.1	13.3 ± 0.8	16.5 ± 0.9
对照(31)	4周 治 20.9 ± 2.1*	12.5 ± 0.9*	15.3 ± 1.1*
	后 12周	20.7 ± 2.3*	12.4 ± 0.9*
			15.2 ± 1.2*

注：与治疗前比较，* $P < 0.001$ ；()内为例数

组效果相似， $P > 0.05$ 。

二、两组血压达标率情况的比较：治疗组第4周末及第12周末时的血压达标率均为79.41%。对照组则分别为77.42%和80.65%。 χ^2 检验，两组无明显差异， $P > 0.05$ 。

三、缓解高血压病常见症状情况的比较：治疗组的总有效率在第4周末及第12周末时分别为79.41%和85.29%。对照组则分别为51.61%和58.06%。 χ^2 检验， $P < 0.05$ 。表明长生降压液较之罗布麻液在缓解高血压病常见症状方面有较好的效果。

四、缓解肾虚证常见症状的情况比较：治疗组的总有效率在第4周末及第12周末时分别为73.52%和82.35%，对照组则分别为0和25.81%。两组有显著差异， χ^2 检验， $P < 0.01$ 。说明长生降压液缓解肾虚症状的效果明显优于罗布麻口服液。

五、两组治疗前后LVMIndex变化情况的比较：见表2。

表2 两组治疗12周后 LVMIndex(g/m²) 变化的比较 ($\bar{x} \pm S$)

组别	例数	治 前	治 后	变化率(%)
治疗	34	114.75 ± 42.40	100.39 ± 36.08*	12.51
对照	31	117.27 ± 36.90	117.68 ± 38.37	0.34

注：与治疗前相比，* $P < 0.001$

结果表明，长生降压液具有使中老年肾虚型高血压病患者LVMIndex减少的效应，而罗布麻口服液则无此效应。

讨 论

根据中医传统理论，肾乃先天之本，肾之

精气是决定人体生长壮老的主要因素。五脏之濡润有赖肾之阴精，五脏之温养有赖肾之命火。肾之精气虚衰，则“形体皆极”，五脏并虚。近年来的研究也表明，老年人各种病症中以虚证为多，其中又以肾虚为最。肾之精气亏虚，则眩晕、耳鸣、耳聋、乏力、气短、腰痛、水肿、健忘及夜尿频多诸症迭生。而这些症状的集中出现，在中老年高血压病中又是常见的。因此，使用补肾的药物治疗中老年高血压病，是符合中医基本理论的。

长生降压液由补肾填精的中药组成，系由清宫“长生羹头春”药酒方化裁而来。经文献考证，长生降压液方中所有药物均经动物实验证实具有降压作用。西苑医院药理研究室的研究结果也表明，该方对由去甲肾上腺素诱发的家兔主动脉血管平滑肌的收缩具有明显的松弛作用；对一肾一夹型高血压大鼠具有明显的降压作用；并有使肾型高血压大鼠血浆血管紧张素Ⅱ浓度下降的趋势。这些结果表明，长生降压液的降压作用是有其药理学基础的。

本文选择了清热平肝的罗布麻叶作为对照药。实验结果表明，从补肾立法的长生降压液对肾虚型高血压病患者较之从肝论治的罗布麻口服液有更好的临床效应。说明高血压病的治疗，仍应本着辨证论治的原则。

自从1953年Hall首次提出降压可以引致高血压性心肌肥厚的消退以来，已有大量的工作证明，降压治疗可以使左室肥厚发生消退⁽³⁾、

不变⁽⁴⁾或增加⁽⁵⁾等不同的变化。发生这些不同变化的原因，除了多种因素的影响之外，降压药本身的药理作用机制起着重要的作用。现已明确，将逆转左室肥厚作为降压治疗的一个单独的指标，是适宜和安全的。认为这将有可能改善大量高血压患者的心功能，减少心衰的发生⁽⁶⁾。对于中药能否逆转高血压性左室肥厚，国内外尚少报道。本结果证明，长生降压液不但可以降压，而且可以同时逆转高血压性左室肥厚。只是因本组病例不多，且所选者皆为肾虚证，故结果有一定的局限性。该药物是否能对其它年龄组或其它证型的高血压病患者产生类似的效果，有待进一步的工作来证实。

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· 新药介绍 ·

新型洗药——洁尔阴

洁尔阴是一种纯中草药复方制剂。由四川省成都市恩威化工有限公司研制并正式生产。是用于预防、治疗性器官疾病、皮肤病和性病的新型洗药。

洁尔阴的主要成份为黄柏、苦参、蛇床子及苍术等。其有清热、解毒、祛风、除湿、止痒等功效，杀菌作用更为明显，临床用于治疗淋菌性、霉菌性、滴虫性及细菌性阴道炎，老年性阴道炎，宫颈炎及外阴白色病变；对单纯疱疹Ⅱ型病毒有直接杀灭作用；对体癣、湿疹、疥疮、神经性皮炎及脚癣等亦有显著疗效。并可用于妇产科术前冲洗和卫生保健用品，经四川省防疫站病毒科检验证明对人体正常细胞无毒副作用。是预防性器官疾病、传染性皮肤病的良药。

沈 青

Abstracts of Original Articles

Effect of the Regimen of Kidney-Tonifying and Qi(气)-Invigorating on Aging Change of Glucocorticoid Receptor

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The plasma cortisol concentration and the sites of glucocorticoid receptor (GCR) in the peripheral lymphocytes were measured in 32 healthy aged persons and 13 young adults. In animal experiment, GCR of spleen lymphocytic cell was also measured in 18 aged rats and 9 young rats. The results showed that GCR was significantly lower in the aged persons or rats than that in the youngers while the plasma cortisol level didn't change with aging. So we think that GCR is more sensitive than the plasma cortisol level to reflect the aging change of the adrenocortex function. After the treatment with the regimen of Kidney-tonifying and Qi-invigorating, the GCR of the aged persons and rats was enhanced, and in this way, the function of the aged adrenal cortex was improved.

(Original article on page 583)

Clinical Study on Antisenility Effect of Ginseng-Rhizome Saponin

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Ginseng-Rhizome is the Rhizome of *Panax ginseng* and popularly named "Shenlu"(参芦). The treatment group treated with the sugarcoated tablets of Ginseng-Rhizome saponin (GRS) orally for two months, one tablet (50 mg per tablet), three times a day. Through the clinical observations of 358 cases of middle and old age persons (age from 50 to 85 years old). The results showed that GRS possessed antisenility effect and marked effect on relieving the symptoms of aging, adjusting organic metabolism and improving physiological function, etc., such as promoting memory, raising the amount of white cells and improving organic immunity function. GRS both improved the function of hypophysisgonad axis and the function of adrenal cortex. It had marked efficacy in the treatment of coronary heart disease with angina pectoris and had better effect on treating concomitant atrial and ventricular prematures. The control group (123 cases, age from 50 to 85 years old) was given sugarcoated tablets of placebo (starch) for two months and then compared themselves with before. There were both no difference in clinical symptoms and experimental tests.

After two years experimental researches and clinical observations, it showed that GRS tablet and Shenlu tablet both have no side effect of vomiting and also no toxic effect when they were taken for a long-term.

(Original article on page 586)

Clinical Evaluation on Effects of Longevity-Antihypertensive-Mixture on Essential Hypertension and Left Ventricular Hypertrophy

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A study which enrolled 65 middle-aged and elderly essential hypertensive patients with Kidney-deficiency pattern was carried out to evaluate the effects of Longevity-Antihypertensive-Mixture (LAM). As LAM was composed of Kidney-tonifying herbs, all the subjects chosen fell into the pattern of Kidney-deficiency in TCM. The subjects were randomized into two groups: The LAM group had 34, and the control group taking Apocyhum Venetum L. Fluid (AVLF) 31. The duration of medication was 12 weeks. The main results were as follows: (1)At the end of week 4, the supine systolic blood pressure (SBP), diastolic blood pressure (DBP) and mean blood pressure (MBP) in LAM group declined from 171 ± 16 (mmHg, the same below), 101 ± 6 and 127 ± 7 to 153 ± 12 , 93 ± 7 and 113 ± 7 respectively. At the end of week 12, the supine SBP, DBP and MBP were 151 ± 14 , 93 ± 6 and 112 ± 8 . There was significance of difference in the reduction of supine blood pressure compared with baseline ($P < 0.001$). AVLF produced similar changes in the reduction of supine SBP, DBP and MBP. However, the magnitude of reduction in SBP and MBP was smaller than those with LAM ($P < 0.001$).