

健脾益气方药的临床疗效观察和实验研究

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内容提要 根据中医脾胃理论,对健脾益气方进行了临床观察和实验研究。结果发现,中医辨证为脾气虚证的慢性胃病、消化性溃疡84例,慢性肾小球肾炎44例及孕吐、妊娠水肿40例患者,服用健脾益气方后的症状及某些实验室检查指标均有不同程度的改善,总有效率分别为92.9%、86.3%和100%。动物实验研究表明,健脾益气方可以明显抑制豚鼠离体回肠或回肠纵行肌条标本被电刺激引起的兴奋现象,并可抑制乙酰胆碱自奥氏神经丛的释放。

用调理脾胃法防治疾病,是中医治疗体系的主要治则之一,几年来我们遵循中医脾胃理论,利用现代科学方法,对脾气虚证和健脾益气方进行了临床观察和实验研究,现将结果报告如下。

临床观察

一、临床资料:本组经中医辨证属于脾气虚证的门诊及住院患者共168例,其中慢性胃炎、消化性溃疡84例(均经胃镜肉眼观察及病理活检证实为慢性胃炎,部分合并胃及十二指肠球部溃疡),男43例,女41例,年龄19~68岁,病程1个月~25年,多数2~10年;慢性肾小球肾炎44例,男19例,女25例,年龄25~68岁,病程1~20年;孕吐、妊娠水肿40例,年龄25~34岁。辨证标准如下:面色淡白;全身疲乏;四肢无力;食欲不振;腹部胀满;大便溏薄。选择具有以上6项中4项,并有舌质淡,舌体胖,苔薄白或有齿痕或有细裂纹;脉象沉缓等与证型基本相符者。除孕吐、妊娠水肿40例随机均分为对照组(20例)及治疗组(20例)外,其余病例均根据健脾益气方治疗前后,进行疗效的对比观察。

二、方法

1. 北京市中医研究所; 2. 北京中医医院; 3. 北京市第六医院; 4. 北京积水潭医院; 5. 北京市永定路医院; 6. 北京妇产医院

1. 治疗方法:健脾益气方组成及服法:生芪30g 党参15g 茯苓30g 白术15g 陈皮15g 生草4g,以上药味水煎2次,合并煎液浓缩至每100ml内含100g中药,每日服2次,每次20ml。对于孕吐、妊娠水肿患者加服川断、寄生及丹参,其中20例对照患者除依常规服用维生素B、C外,以焦三仙30g代替健脾益气方并加适量蔗糖煎煮,服法同前,每疗程为2个月。治疗前后观察证候、病理及血清胃泌素等指标的变化。

2. 实验室检查:(1)血清胃泌素测定:放射免疫法^[1]。(2)血清甘胆酸测定:放射免疫法。(3)血中类乙酰胆碱物质及乙酰胆碱酯酶测定:采用化学法^[2]。(4)全血5-羟色胺及组胺测定:荧光测定法。

三、结果

1. 疗效评定标准:(1)证候疗效评定:显效:症状基本消失或显著好转;有效:症状及舌象、脉象有好转;无效:症状及舌象、脉象无变化或恶化。(2)客观指标疗效评定:治疗前后各项检查指标经统计学处理,有显著性改变者为有效,恢复正常为显效。(3)病理改变疗效评定:对于慢性胃炎、消化性溃疡患者,参考胃镜肉眼观察和病理活检的变化,作出综合疗效评定。

2. 结果

(1)慢性胃炎、消化性溃疡:84例患者经治

疗后 78 例临床症状均有不同程度的好转,其中 60 例治疗后腹痛和腹胀基本消失,食欲和乏力明显好转,大便由溏薄转为成形。84 例中 32 例进行了胃镜肉眼及病理活检复查,其中显效(炎症病变大部吸收,出血糜烂消失,肠上皮化生好转)11 例,占 34.3%。16 例炎症浸润、出血糜烂等有所减轻,占 50%。无效 5 例,占 15.7%。多数患者治疗前后进行了血清胃泌素、甘胆酸、血类乙酰胆碱物质及乙酰胆碱酯酶活性测定,结果发现,血清甘胆酸明显升高 ($P < 0.05$),说明脾虚证患者经健脾益气方治疗后排泄胆汁酸的功能有所改善,见表 1。

表 1 健脾益气方对慢性胃炎及消化性溃疡患者血甘胆酸等含量的影响 ($\bar{X} \pm SE$)

	胃泌素 (pg/ml)	甘胆酸 (μ g/ml)	类乙酰胆碱 物质 (μ g/ml)	乙酰胆碱 酯酶 (n%)
治前	146.0 $\pm$ 17.1 (29)	109.0 $\pm$ 9.0 (79)	40.5 $\pm$ 1.7 (78)	980.0 $\pm$ 71.0 (78)
治后	105.0 $\pm$ 13.7 (29)	143.0 $\pm$ 9.0 (79)	41.3 $\pm$ 1.8 (78)	650.0 $\pm$ 41.0 (73)

注: () 内数字为测定例数; * 治疗前后比较 $P < 0.05$

综合以上情况,84 例中属于显效者 60 例 (71.4%),有效者 18 例 (21.4%),无效者 6 例 (7.1%),总有效率 92.9%。

(2)慢性肾小球肾炎:本组患者经治疗后,44 例患者中 41 例症状有不同程度的改善,如

全身乏力、自汗、畏寒、肢冷、大便溏薄及腹胀基本消退或显著好转。治疗后 35 例尿蛋白检查有不同程度改变,其中尿蛋白阴转者 16 例 (36.4%),减少 (+) 以上者 19 例 (43.2%),无效者 9 例 (20.1%)。血中 5-羟色胺及组织胺水平呈不同程度的降低,并有逐渐接近正常值的趋势,见表 2。

表 2 健脾益气方对慢性肾炎患者 5-羟色胺等的影响 ($\bar{X} \pm SE$)

	例数	5-羟色胺 (ng/ml)	组织胺 (ng/ml)
治前	44	112.8 $\pm$ 8.2	110.9 $\pm$ 6.72
治后	44	104.3 $\pm$ 6.7	109.5 $\pm$ 5.1

综合上述情况,治疗后 44 例慢性肾小球肾炎患者中属于显效者 7 例 (15.9%),有效者 31 例 (70.5%),无效者 6 例 (13.7%),总有效率 86.3%。

(3)孕吐、妊娠水肿:两组患者经治疗后,临床症状均有不同程度改善,治疗组 20 例痊愈 8 例 (40%),显效 2 例 (10%),好转 10 例 (50%),总有效率 100%。而对照组总有效率仅为 65%。

两组治疗前后血中胃泌素等指标的测定发现,用健脾益气方治疗后,甘胆酸含量明显升高,而两组患者乙酰胆碱酯酶均有所降低 ($P < 0.05$),见表 3。

表 3 两组孕吐、妊娠水肿患者血清胃泌素等变化 ($\bar{X} \pm SE$)

组	别	例数	甘胆酸 (pg/ml)	胃泌素 (μ g/ml)	类乙酰胆碱 (μ g/ml)	乙酰胆碱酯酶 (n%)
对 照	治前	20	71.1 $\pm$ 5.7	112.3 $\pm$ 11.5	41.8 $\pm$ 4.4	1579.0 $\pm$ 128.0
	治后		87.9 $\pm$ 13.0	127.9 $\pm$ 24.7	50.1 $\pm$ 5.5	855.0 $\pm$ 49.0*
治 疗	治前	20	56.4 $\pm$ 4.3	116.3 $\pm$ 14.1	38.3 $\pm$ 4.2	1523.0 $\pm$ 183.0
	治后		102.7 $\pm$ 42.5*	147.9 $\pm$ 10.0	47.0 $\pm$ 1.7	684.0 $\pm$ 47.8*

* 与治疗前比较, $P < 0.05$

实验研究

一、对豚鼠离体回肠及回肠纵行肌条标本被电刺激诱发收缩的拮抗作用:参照赵子厚的方法^[9],制备豚鼠离体回肠及回肠纵行肌条标本,并用方波电刺激使之兴奋,观察健脾益气方对电刺激所致兴奋的拮抗作用。结果发现健脾益气方对上述两种制备标本的兴奋现象均呈

明显的抑制作用,该方在 10^{-8} g/ml 的浓度下,对回肠标本兴奋的抑制率为 $77.2 \pm 4.5\%$,其抑制作用随浓度的增加而逐渐加强。

二、对豚鼠离体回肠纵行肌条标本乙酰胆碱释放的影响:依 Paton 等的方法制备保留奥氏神经丛 (Auerbach's plexus) 的回肠纵行肌条标本^[9],方波电刺激 0.5Hz,波宽 1ms,电压 120V;乙酰胆碱测定按 Vapaatalo 法进行。结

果显示, 健脾益气方在一定的浓度下可以显著抑制乙酰胆碱自奥氏神经丛的释放, 见表4。

表4 健脾益气方对豚鼠回肠纵行肌条标本乙酰胆碱释放的影响 ($\bar{X} \pm SE$)

组别	肌条标本数*	乙酰胆碱释放量	
		pmol/脉冲	pmol/g肌条/min
对照组	7	394.6 $\pm$ 28.2	8046.5 $\pm$ 625.2
健脾益10 ⁻² g/ml	7	77.2 $\pm$ 20.6	1850.4 $\pm$ 495.1
气方组5 $\times$ 10 ⁻³ g/ml		195.6 $\pm$ 27.4	4696.1 $\pm$ 656.6
盐酸吗啡(10 ⁻⁶ M)	7	0.5 $\pm$ 0.3	154.8 $\pm$ 3.5

* 肌条标本平均重量109.5 $\pm$ 15.5mg

三、对大鼠慢性醋酸性胃溃疡模型的影响: 模型制作参照王志均等的方法, 以甲氧咪呱作为阳性对照药物。结果表明在健脾益气方10g/kg的剂量下对大鼠慢性醋酸性胃溃疡模型的修复过程具有明显的促进作用, 以溃疡指数(mm²)为指标, 对照组、健脾益气方组及甲氧咪呱组(50mg/kg)分别为55.6 $\pm$ 5.2, 33.8 $\pm$ 2.3及28.6 $\pm$ 3.7。与对照组经方差分析比较, $P < 0.05$ 。

讨 论

我们的工作曾证明, 脾气虚证患者消化系统功能多有不同程度的障碍⁽⁵⁾。“虚则补之”是中医的治疗原则之一, 而健脾益气又是补法中的一个重要治法。本文所观察的病例, 在应用健脾益气方治疗以后, 不仅临床症状有明显好转或基本改善, 而且整体都得到满意的恢复, 说明健脾益气方能从根本上促使脾气虚证患者的病理生理变化趋向正常, 因而某些客观检查

指标亦有相应的变化。从本文所得结果可见, 在慢性胃炎、消化性溃疡和孕吐、妊娠水肿患者, 经服本方后血清甘胆酸水平都有不同程度的升高, 说明健脾益气方可以通过增加胆汁酸的排泄过程, 对改善消化系统功能障碍起到一定的促进作用。而某些脾气虚证患者服用健脾益气方后, 血中5-羟色胺及组织胺水平的下降, 对维持胃肠道的正常运动及分泌过程, 亦可以起到一定的有益作用。

从动物实验结果可见, 健脾益气方对豚鼠离体回肠及纵行肌条标本被电刺激所致的兴奋现象有明显的抑制作用, 而此抑制作用已知是由于减少了副交感神经递质自神经末梢或神经节处的释放。我们推测健脾益气方对临床脾虚证患者的便秘、泄泻的治疗效果可能与上述作用有关, 而此作用似与Yagasaki报道之氯苯哌酰胺(Loperamide)作用类同⁽⁶⁾。

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• 书讯 •

《癌的扶正培本治疗》出版

《癌的扶正培本治疗》由福州市中西医结合肿瘤研究所潘明继主任医师编著, 福建科学技术出版社出版。该书全面系统地介绍了中医对肿瘤扶正培本的理论根据、治则、方药等, 具有实用性。在总论中, 主要阐明中医(包括西医)扶正培本治疗癌证的原理, 介绍行之有效的临床经验及近年来国内有关扶正培本治癌的成就和进展。在各论中, 概要性地介绍35种常见癌证的病因、病理、临床表现、诊断、治疗和预后, 着重介绍中医扶正培本、辨证施治、单方验方的治疗。该书可供临床各科的中医、西医、中西医结合工作者和从事免疫研究的科技人员参考, 也适合高等、中等医学院校的学生及基层的医务人员阅读。

(本刊讯)

deficiency and Liver Yang(阳) associated with Phlegm among type A behavior patients and 82.5% of Heart Qi(气) Yang deficiency and Qi Yin deficiency among non-type A behavior patients. By means of relaxation training, EMGBT might reduce sympathetic tone, dilate blood vessels, so as to reduce blood pressure and treat arrhythmia. (Original article on page 533)

Clinical Observation and Experimental Study on Jianpi Yiqi (健脾益气) Prescription

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According to "Spleen-Stomach" theory, the effect of Jianpi Yiqi prescription (JPYQ) was observed clinically and studied experimentally. 168 cases manifested as Spleen-Qi(气) deficiency including chronic gastritis and peptic ulcer (84 cases), chronic glomerulonephritis (44 cases) and vomitus gravidarum-edema of pregnancy (40 cases) were treated with JPYQ. Estimation were made based on their clinical conditions. Serum gastrin, serum cholyglycine, blood acetylcholine and cholinesterase, blood 5-HT and histamine were measured before and after treatment. The overall effective rate was 92.9% in gastritis and peptic ulcer group, 86.3% in nephritis group and 100% in pregnancy group respectively.

A marked increase of serum glycocholic acid level was shown in gastritis and peptic ulcer and vomitus gravidarum groups. That was considered as the result of the secretion of cholic acid by this prescription. Clinical improvement was also obtained in nephritis group accompanying disappearance of albuminuria in 36.4%. Blood level of 5-HT and histamine lowered to some extent and tended to be normal. Besides, this prescription markedly inhibited electric stimulated excitement on isolated longitudinal muscle strip of guinea pig's ileum. The mechanism could be the inhibition of release of acetylcholine from Auerbach's plexus by this prescription. (Original article on page 537)

Study on Antiplatelet Aggregation Effect of *Andregraphis paniculata*

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This article deals with the antiplatelet aggregation effect of *Andregraphis paniculata* (AP), 61 blood samples and 8 volunteers were investigated to observe the effect of AP on platelet function in vitro and in vivo respectively. The results showed that the crude extract of AP could inhibit significantly one-phase and two-phase platelet aggregation induced by ADP ($P < 0.001, 0.01$). The potency of AP crude extract seemed to be somewhat stronger than Ligustrazine and Persantin injection in vitro, but the difference was not statistically significant ($P > 0.05$). A dose-effect relationship of AP was demonstrated also ($r = 0.93$).

The rapid effect of this drug on platelet aggregation in vivo suggested that AP could be absorbed quickly, but the effect lasted for only a short time. 12 hours after with-drawing of AP, the 1 minute and 5 minutes aggregation rates increased by 18.67%, 36.63% respectively, as compared with the lowest aggregation rate after administration. The activating effect of AP on fibrinolysis was also detected by shortened euglobulinlysis time (211.50 vs 182.50 min in vitro, 219.38 vs 149.38 min in vivo, $P < 0.001$). In addition, the influence of AP upon coagulation and thrombelastogram was determined. This study suggested that AP is a promising antithrombogenic agent. This drug might be beneficial in preventing and treating arterial thrombotic diseases. (Original article on page 540)

The Influence of Qigong(气功) Therapy upon Serum HDL-C of Hypertensive Patients

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The serum HDL-C concentration of 100 hypertensive patients had been measured. The results showed that the mean levels of cholesterol (Tc), triglyceride (Tg), LDL-C and AI (AI-Tc-HDL-C/HDL-C) in the serum of male hypertensive patients ($n=100$) all were significantly higher than those of male normotensive subjects ($n=50$), while the mean levels of serum HDL-C, HDL-C/Tc and HDL-C/LDL-C of male hypertensive patients all were significantly lower than those of male normotensive subjects. The 100 hypertensive patients were also divided randomly into Qigong group (Qigong with regularly antihypertensive drug taking, $n=50$) and control group (with regularly antihypertensive drug taking only, $n=50$). After one year treatment, in Qigong group, the levels of Tc, Tg, LDL-C and AI were decreased; while the levels of HDL-C, HDL-C/Tc and HDL-C/LDL-C were significant increased. In control group, however, no significant changes were found. The differences between the two groups both were statistically significant ($P < 0.05 \sim 0.001$). The above results indicated that Qigong practising could elevate serum levels of HDL-C and regulatory metabolism of lipid. (Original article on page 543)