

补肾益气法治疗直立性调节障碍

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内容提要 60例直立性调节障碍患儿随机分为治疗组及对照组各30例，治疗组以补肾益气法组方治疗，对照组以常规谷维素片及维生素B₁、B₆治疗。一个疗程结束后，治疗组治愈16例，好转8例，总有效率为80%；对照组治愈4例，好转6例，总有效率为33.3%。两组治愈率及总有效率比较差异均极显著， $P<0.01$ 。治疗组部分病例治疗后RBC、Hb、血清铁(SI)、总铁结合力(SIBC)、平均红细胞血红蛋白量(MCH)值自身对照亦有相应改善， $P<0.01$ 。

关键词 直立性调节障碍 补肾益气法 谷维素 微量元素

直立性调节障碍(Orthostatic dysregulation)是儿童常见的一种自限性疾病。据国内外的分析报告，学龄儿童发病率为10~15%^{①,2}。由于其临床表现多样化，常是险恶状发作，直接影响了儿童的作息及学习，因而应给予足够重视及积极治疗。鉴于目前无特异性药物治疗，我们运用中医补肾益气法组方进行治疗，效果满意，现介绍如下。

临床资料

一、诊断标准：参照文献^{①,2}并简化成如下：诊断主要条件：(1)突然体位改变导致黑蒙、眩晕或无地点选择晕倒。(2)直立试验阳性^②。(3)晨起精神萎靡，疲乏。诊断次要条件：(1)食欲不振，颜面苍白。(2)晕车史。(3)运动量稍大，感气促，心悸，头昏欲呕。临幊上能除外心、肝、肺等脏器疾患，原发及继发性癫痫、糖尿病(包括晨起Somogy's效应)、原发性低血糖等疾患。临床具备二个主要条件或一个主要条件，二个次要条件即可确诊。本组60例均具备以上确诊标准。

二、临床资料：本组60例患者均系小学学龄儿童，年龄8~14岁，平均10.41±2.12岁($\bar{x}\pm S$)。男21例，女39例。临床症状除主、次要诊断条件外，较常见的还有不明原因，可自行缓解的腹绞痛；经常游走位置的头痛；上课注意力不集中；易惊恐，遇强烈刺激后全身

不适等。患儿按就诊次序随机分为治疗组及对照组。组间年龄、性别、主要诊断条件分布、居住、营养状况基本相同($P>0.05$)。60例均常规测定心率，血压，周围血像及心电图。按直立试验阳性的检测条件^②，两组直立后心率增加42例。心电图T波改变18例。血压收缩压下降及/或脉压差减少38例。实验室检查达轻度贫血标准^③43例。7例脑电图检查，12例2次行空腹血糖检查均未见异常。两组37例治疗前后还检测了红细胞数(RBC)、血红蛋白(Hb)、血清铁(SI)、总铁结合力(SIBC)、平均红细胞容积(MCV)、平均红细胞血红蛋白浓度(MCHC)、平均红细胞血红蛋白量(MCH)。并作统计处理。

三、临床辨证分型：按中医虚证辨证参考标准^{④,5}，治疗组肾虚者13例，脾气虚者17例。

四、疗效观察方法：由患儿及家长详述治疗中的临床诊断条件发生频率、程度及消失时间。固定医师每星期门诊2次并记录心率、血压变化。治疗结束重测心电图一次。全疗程为1个月。

治疗方法

治疗组按临床辨证分型组方。肾虚组按补肾固本治则组方：肉桂4g 紫草12g 山茱萸6g 淮山药12g 熟地12g 杜仲8g 枸杞子

8g 牛膝 8g 自然铜20g。每日1剂分2次服。
脾气虚组以健脾益气为治则组方：黄芪20g
白术8g 党参20g 柴胡6g 升麻6g 伏苓
12g 陈皮6g 自然铜20g。服法同上。

对照组口服谷维素片20mg，每日3次，酌加维生素B₆、B₁。两组疗程均为1个月。由于主次要诊断条件不及1个月消失而自行停止服药者，随访按全疗程结束治愈计数。

结 果

一、疗效评定标准：治愈：临床主、次要诊断条件完全消失，食欲增加，全身情况有显

著性改善。有效：主要条件消失，次要条件未完全消失，但发生频率及程度亦见明显改善。基本不影响作息及学习。未愈：临床主次要条件发生频率、程度未见明显变化。

二、结果：治疗组治愈16例(53.3%)，好转8例(26.7%)；对照组治愈4例(13.3%)，好转6例(20.0%)。治疗组的治愈率优于对照组($\chi^2=9.075$ ； $P<0.01$)。总有效率亦优于对照组($\chi^2=11.47$ ； $P<0.01$)。两组治疗前后RBC、Hb、SI、SIBC、MCV、MCH、MCHC的量值见附表。以配对t值法进行组内治疗前后量值统计处理，治疗组除MCV、MCHC外，其它项

附表 两组治疗前后实验室检查结果比较 ($\bar{x} \pm S$)

组别	例数	RBC ($\times 10^{12}/L$)	Hb (mmol/L)	SI ($\mu\text{mmol}/L$)	SIBC ($\mu\text{mmol}/L$)	MCV (fl)	MCH (fmol)	MCHC
治疗	治疗前	3.64±0.71	6.42±0.87	9.45±0.48	76.75±19.35	79.95±61.11	0.43±0.03	0.32±0.01
	治疗后	3.84±1.76 [△]	7.39±0.17 [△]	11.64±1.36 [△]	65.42±13.31 [△]	78.90±70.10	0.61±0.27	0.30±0.01
对照	治疗前	3.58±0.67	6.25±0.88	9.42±0.51	75.71±18.20	78.90±62.11	0.46±0.01	0.32±0.01
	治疗后	3.61±0.71	6.27±0.81	9.47±0.48	68.37±15.41 ^{△△}	79.04±61.80	0.45±0.06	0.32±0.04

注：治疗前后组内比较 $\Delta P<0.01$ ； $\Delta\Delta P<0.05$

量值进步均有非常显著性意义($P<0.01$)。而对照组除SIBC差异有显著意义外($P<0.05$)，其它项量值均未见变化。

讨 论

一、明代张介宾在《景岳全书》中说：“命门为气之根，为水火之宅，五脏之阴气，非此不能藏，五脏之阳气，非此而不能发”。本文符合肾虚辨证类型患儿所致临床表现应与先天不足相关。临床运用补肾固本法组方收效，从而说明了“稚阴稚阳”的幼儿，先天之“肾”在生理过程中的重要位置。《难经·八难》指出：“气者，人之根本也”。气具推动、温煦、固摄等作用。气虚则见生长发育迟缓，血行停滞等弊端。本文符合脾气虚辨证类型患者经用健脾益气法组方收效，亦说明了“脾主后天”在幼儿生理过程中的重要性。

二、本文临床资料说明有71.7%的患儿存在轻度贫血。治疗组患儿经补肾益气法组方治疗，随临床症状及体征改善，实验室数据亦说

明贫血情况改善，因而贫血与直立性调节障碍似存在一定的因果关系内涵。

三、已经证实虚证患者的血清铁、锌等均明显下降^[6]。铁是血红蛋白的必需组份。锌是许多蛋白质核酸合成酶的组份，已知许多酶的活性与锌含量相关。具有补肾健脾益气的中药，富含微量元素者甚多，本文设计中，我们亦有目的地应用一些富含微量元素的补益药。如含铁较多的紫草(3380ppm)；柴胡(363ppm)；含锌较多的白术(705ppm)，党参(930ppm)。自然铜含40多种微量元素^[7]。

四、目前，对直立性调节障碍的病因认识较多的是植物神经功能失调，外周血管收缩不完善导致于体位急变时血液的不恰当体内分布。一般认为随着儿童成长，植物神经调节的逐步完善，成年前可望自愈。但由于自愈周期长，临床有险恶状发作等表现，除对患儿的作息、学习、成长有害外，对家长心理上也是一个极大的负担。故积极寻找治疗手段是必要的，补肾益气法组方治疗是一个值得进一步

研讨的办法。

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原发性高血压病血瘀证患者血小板环核苷酸含量分析

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许多研究表明原发性高血压病患者有血小板形态、生化、功能等方面异常。但该病中医血瘀证型血小板的改变进一步研究还是一个新课题。本文作者在1987~1988年期间比较了正常人、高血压病血瘀证与非血瘀证患者血小板环磷酸腺苷(Pt-cAMP)及血小板环磷酸鸟苷(Pt-cGMP)含量, 以分析高血压病血瘀证患者血小板状态。

临床资料

按WHO高血压诊断标准, 删除继发性高血压, 既往体健, 共选取高血压病患者69例, 又按1986年全国血瘀证诊断试行标准, 进一步分为血瘀证患者22例, 男性14例, 女性8例, 非血瘀证患者47例, 男性25例, 女性22例。

健康人为普通献血者22名, 男13名, 女9名; 年龄34~63岁, 平均40.5岁。

实验方法

根据柴枝楠等[中西医结合杂志 1984; 4(8):487]介绍的方法。在破碎血小板前所用器械均硅化或用塑料制品。取静脉血5ml于0.5mM EDTA-Na抗凝管中, 离心(900r/min, 5min)取富含血小板血浆(PRSP), PRSP再离心(3500r/min, 10min)分离富含血小板血浆(PPP)和血小板沉集块。用光学显微镜分别计PRSP、PPP中血小板数, 二者差值为沉集块中血小板数目。沉块中依次加入0.9%NaCl 0.5ml, 蒸馏水1ml(轻摇, 置2min)、1.5%NaCl 0.25ml, 离心弃上清液, 子血小板沉集块中加入蒸馏水1ml, 破碎搅匀, 加入15%CCl₄COOH, 乙醇抽提3次, 溶液置小烧杯中负压抽干, 20°C保存。

放射免疫分析法测定cAMP、cGMP, 采用中国协和医科大学基础所提供的药箱, 选用国产FJ-2101四道液体闪烁计数器。

用方差分析法判别血小板环核苷酸在三组间差别是否有显著性意义。

结 果

见附表。

附表 三组血小板环核苷酸含量组间比较 ($\bar{x} \pm S$)

组 别	例 数	Pt-cAMP	Pt-cGMP
		(pmol/10 ⁹ 个)	(pmol/10 ⁹ 个)
正 常 人	22	17.85 ± 4.93	2.30 ± 0.93△△
高 血 压 非血瘀证	47	20.18 ± 8.60△	3.60 ± 1.92
血 瘀 证	22	15.49 ± 6.70	3.61 ± 1.31*

* 样本数为20例, △与血瘀证组比, $P < 0.05$; △△与高血压组比, $P < 0.01$

高血压病非血瘀证组Pt-cAMP均数较正常人稍高, 血瘀组Pt-cAMP较正常人稍低, 二组患者Pt-cAMP与正常人均无显著性差别, 而高血压病二组患者Pt-cAMP含量差别有显著性意义, $P < 0.05$ 。二组高血压病患者Pt-cGMP含量较正常人明显上升, 均数差别有非常显著性意义, $P < 0.01$, 高血压病二组间差别不明显。

讨 论

目前已发现许多刺激血小板活性的药物可使Pt-cAMP下降、Pt-cGMP上升, 许多抑制血小板活性物质可使Pt-cAMP上升、Pt-cGMP下降, 多数作者认为Pt-cAMP可能作为血小板功能调节的第二信使, 而Pt-cGMP改变则可能是血小板聚集释放反应的结果。

本研究显示高血压病血瘀证患者Pt-cAMP含量较非血瘀证患者明显降低, 较正常人亦有所降低, 另外, 高血压病血瘀证患者Pt-cGMP含量较正常人显著升高, 说明该病血瘀证阶段血小板处于被激活状态, 且内在负反馈代偿机制破缺。

Gan-Zheng. The total effective rate was 90.2%, and the significantly effective rate was 60.79%. Various symptoms of patients using this prescription disappeared or improved. The increase of body weight, height and subcutaneous fat of these patients was faster than those of the blank control group and the group using zinc sulfate. The difference was statistically significant among those three groups. It was indicated that effects of the SZL group were not caused by children's natural growth and development. There was an obvious advantage over the zinc sulfate group with regard to clinical effects, side effects and total synthetic effects. It was concluded SZL is an effective prescription for curing patients with early stage of Gan-Zheng and stimulating children's growth and development. Hemoglobin, D-xylose in urine, serum gastrin, serum zinc ion were detected before and after the treatment. It was suggested that SZL had the effects to stimulate gastrointestinal secretion and absorption, to improve digestive function, to increase serum zinc ion and to cure anemia.

(Original article on page 275)

Preliminary Study of TCM Treatment of Minimal Brain Dysfunction: Analysis of 100 Cases

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This paper reports the clinical treatment of 100 patients with minimal brain dysfunction (MBD). their age ranged from 7~14.2 years, and the average age was 10.5. Patients were divided into TCM and WM group randomly. The TCM group (80 cases) were treated with the therapy of subduing hyperactivity of the Liver and invigorating the function of the Spleen by using: *Bupleurum chinense*, *Scutellaria baicalensis*, *Astragalus membranaceus*, *Codonopsis pilosula*, *Ligustrum lucidum*, *Lophatherum gracile* and thread of ivory. The WM group (20 cases) were treated with retalin 5~15 mg twice daily. One course of treatment lasted one month, and effects were evaluated after 1~3 courses of treatment. The results were as follows: In the TCM group, 23 cases were cured (clinical symptom and sign disappeared, 10 IQ units were raised in their intelligence, abnormal electrocephalogram was recovered and there was no recurrence during the first six months after recovery). 46 cases were improved (clinical symptom and sign markedly improved, 4 IQ units raised in intelligence and electrocephalogram improved), and 11 cases ineffective. The effective rate was 86.25%. In the WM group, 6 cases were cured, 12 cases improved and 2 cases ineffective, the clinical effective rate being 90.0%. There was no significant difference between the two groups in this study, but, the side-effects of the TCM group was less than the WM group, and the TCM group had more beneficial effects to improve intelligence, enuresis and the black of orbits. The study showed that the Verbal Scale in Wechsler Intelligence Scale for children is one of the indications of diagnosis and evaluating of the curative effect of MBD.

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Treatment of Orthostatic Dysregulation by the Principle of Bu-Shen Yi-Qi(补肾益气)

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Sixty cases of orthostatic dysregulation was randomly divided into treatment group (TG) and control group (CG), both 30 cases. Traditional Chinese medical herbs were used for TG under the principle of Bu-Shen Yi-Qi, and routine treatments such as oryzanol, vitamin B₁ and B₆ were applied to CG. After a curable stage of one month, the results showed that 16 of TG and 4 of CG were cured; 8 of TG and 6 of CG improved. The cure rate and the effective rate were significantly better in TG than in CG ($P < 0.01$). 43 cases (71.7%) clinically expressed mild anemia. Before and after the treatment, the values of RBC, SI, Hb, SIBC, MCH in 20 cases of TG turned significantly better ($P < 0.01$), but 17 cases of CG remained unchanged under the principle. The authors purposefully selected herbs that contain rich trace elements. For example, iron is an important element of Hb and zinc is an element in proteotic nucleicacidase. The quantity of zinc in body is related to many emzyme activities. Since these herbs could increase chronotropic effect of blood vessels and cure anemia, they could be used to cure patients with orthostatic dysregulation.

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