益气养阴法治疗慢性肾小球肾炎血浆环核苷酸及免疫指标变化的初步观察

——附41例临床分析

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内容提要 本文报告 41 例慢性肾小球肾炎脾肾气阴两虚证患者，治疗前测定：血浆 cAMP、cGMP 含量升高，cAMP/cGMP 比值下降；免疫球蛋白 (Ig)G 含量降低；细胞免疫 Ea 花环含量明显低于正常值，Es 花环含量略高于正常值。经益气养阴法治疗后总有效率 90.24%，血浆 cAMP、cGMP、IgG、Es、Ea花环含量均逐渐恢复正常。治疗前后对比，差异均有非常显著性意义 ($P<0.01$)。提示，慢性肾小球肾炎脾肾气阴两虚证的物质基础，可能与细胞内环核苷酸双向控制系统失调、免疫功能紊乱有关；益气养阴法治疗慢性肾小球肾炎脾肾气阴两虚证，可能有双向调节细胞内环核苷酸及免疫功能的作用。

近几年临床慢性肾小球肾炎脾肾气阴两虚证逐渐增多，约占慢性肾小球肾炎证型的30～35%[1,2]。我们于 1983 年 7 月起重视了对脾肾气阴两虚证辨证论治的研究。为了探讨脾肾气阴两虚证的物质基础，以及益气养阴法的作用机理，在治疗前后同时测定了患者的血浆 cAMP、cGMP，血清 IgG、IgA、IgM，细胞免疫 Ea、Es 花环指标，现将观察结果报告如下。

对象和方法

一、病例选择：本组 41 例慢性肾小球肾炎患者，住院患者 34 例，专科门诊患者 7 例。所有患者均经详细专科检查，并在治疗前后测定了血清 IgG、IgA、IgM，其中 39 例同时测定了细胞免疫 Ea、Es 花环，20 例还测定了血浆 cAMP、cGMP。正常值：血清 IgG、IgA、IgM，细胞免疫 Ea、Es 花环正常值，检测了 50 名健康大学生。血浆 cAMP、cGMP 正常值，检测了14名健康献血员。

二、诊断标准：中医慢性肾小球肾炎脾肾气阴两虚证辨证标准(见表 1)；西医慢性肾小球肾炎诊断按 1977 年“北戴河肾炎座谈会”分类方案[3]。

表 1 慢性肾炎脾肾气阴两虚证辨证标准

证别	主要症状	次要症状
脾气虚	疲倦乏力，食欲减退或食后腹胀，舌淡有齿痕苔白润，脉缓弱或细弱。	面色萎黄或虚浮，少气懒言，大便稀溏或干溏不调，带下量多色白清稀，轻度浮肿。
肾阴虚	咽燥口干，手足心热，舌红少苔，脉细或细数。	头晕，少寐盗汗，升火烘热，便秘溺赤，遗精或月经失调，长期咽痛或咽红。
肾虚	腰脊酸痛，软脱跟痛，脱发齿忘，耳鸣听力减退，小便余沥或夜尿增多，两尺脉弱。	
辨证标准	肾虚症一项加脾气虚和肾阴虚症的主症各二项，或主症各一项，次症各二项以上。	

三、治疗方法：(1)基本方：太子参 30g 绵黄芪 30g 怀山药 15g 旱莲草 15g 枸杞子 12g 山萸肉 12g 桑寄生 30g 杜仲 12g 怀牛膝 12g 车前子 10g 生牡蛎 30g 益母草 30g。(2)紫河车粉 1.5g，一日二次。(3)

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消蛋白尿粥(芡实 30g　白果 10 枚　粳米 30g 煮粥) 一日一次，10 天为一疗程，一般间歇 2～4 天，连续服 2～4 疗程。

四、疗效标准：按 1964 年中华医学会制定的肾小球肾炎的疗效标准[4]，分完全缓解、基本缓解、部分缓解、无效或恶化。

五、实验方法：

1. 血浆环核苷酸测定：血浆 cAMP、cGMP 及 cAMP/cGMP 比值，均采用放射免疫测定法(上海第二医学院同位素室药匣)。

2. 免疫测定：血清 IgG、IgA、IgM，采用琼脂单向免疫扩散法。细胞免疫 Ea-RFC(活性 E 花环)，采用 Wybran 法，该法不需 4°C 放置一定时间，能立即形成花环；Es-RFC(稳定性 E 花环)，采用 Galili 法，在 E 花环试验中，花环的结合是很疏松的，经振摇置于 37°C 水浴 30 分钟后，绝大多数花环解离，其中不解离的称为 Es 花环。

结　果

41例患者，经用益气养阴法治疗后，总有效率为90.24%，完全缓解 8 例(19.51%)，基本缓解 12 例(29.27%)，部分缓解 17 例(41.46%)、无效 4 例(9.76%)。

一、免疫球蛋白：41例患者，经益气养阴法治疗后，血清 IgG 含量明显升高，与治疗前对比，差异有非常显著性意义(P<0.01)；IgA、IgM 含量变化不大，治疗前后对比，差异无显著性意义(P>0.05)。见表 2。

表 2　41例慢性肾小球肾炎治疗前后免疫球蛋白变化　(M±SE)

血清免疫球蛋白 (mg%)	治疗前	治疗后	P 值
IgG	842.73±55.99	1019.85±56.25	<0.01
IgA	198.61±18.6	214.02±13.54	>0.05
IgM	129.88±12.64	135.7 ±11.34	>0.05

注：血清免疫球蛋白正常值mg%：IgM888～1770.5，IgA (50～300，IgM81～124

二、细胞免疫：39例患者 Ea 花环含量治疗前明显低于正常值，经益气养阴法治疗后逐渐升高，治疗前后对比，差异有非常显著性意义(P<0.01)；Es 花环治疗前略高于正常值，治疗后下降至正常，治疗前后对比，差异也有非常显著性意义(P<0.01)。见表 3。

表 3　39例慢性肾小球肾炎治疗前后细胞免疫变化 (M±SE)

细胞免疫 (%)	治疗前	治疗后	P 值
Ea花环	24.04±0.64	28.27±0.54	<0.01
Es花环	5.38±0.26	3.97±0.31	<0.01

注：细胞免疫正常值%：Ea花环28±3.64，Es花环3～5

三、血浆环核苷酸：20例患者，治疗前血浆 cAMP、cGMP 含量均明显高于正常人组的含量，cAMP/cGMP 比值又明显低于正常人组的含量，二组含量比较，差异均有非常显著性意义 (P<0.01)；经用益气养阴法治疗后，血浆 cAMP、cGMP 的含量，以及 cAMP/cGMP 含量比值逐渐恢复正常，治疗前后含量及比值比较，差异均有非常显著性意义 (P<0.01)。见表 4。

表 4　20例慢性肾小球肾炎治疗前后血浆环核苷酸含量比较 (M±SE)

血浆环核苷酸 (pmol/ml)	cAMP	cGMP	cAMP/cGMP
治疗前	39.13±1.33	22.21±0.73	1.8 ±0.08
治疗后	21.9 ±0.75	6.83±0.35	3.38±0.21
P值*	<0.01	<0.01	<0.01
正人常组14例	22.86±0.73	5.25±0.49	4.35±0.91

* P 值表示：治疗前、后血浆环核苷酸含量与正常人组含量比较的差异

讨　论

一、慢性肾小球肾炎脾肾气阴两虚证与血浆环核苷酸、免疫的关系：近几年，从分子生物学认识到：许多神经递质、激素及一些生物活性物质对靶细胞发挥生理效能是通过细胞内的介质—环核苷酸(cAMP、cGMP)，这是一对拮抗物，对生物细胞有双向调节作用，对代谢影响极大，并能调节机体的自稳、防御和监视三大免疫功能，既保持了内环境的恒定，又能适应变化着的外环境。人体血浆中 cAMP 和 cGMP 任一含量改变或比例失调达到一定程度

时，细胞功能随之改变，从而影响机体免疫功能，使得抗病能力减退。这与中医学阴阳学说颇有一定的内在联系，利用测定血浆环核苷酸含量，研究中医证型的物质基础，已引起重视，一般认为：阴虚时主要矛盾是cAMP含量升高，阳虚时主要矛盾则是cAMP/cGMP含量比值降低[5]。那么，在慢性肾小球肾炎，临床同时出现气虚和阴虚两类不同证候时，体内血浆环核苷酸含量变化是否有一定规律？同时与免疫功能紊乱是否也有一定联系？根据本组治疗前同时测定的血浆环核苷酸、免疫结果：脾肾气阴两虚证血浆cAMP含量明显升高，cGMP含量也同样上升，而cAMP/cGMP比值则明显低于正常（表4）；说明脾肾气阴两虚证血浆环核苷酸含量变化，既见阴虚特点，又有阳虚特点。免疫方面：IgG含量降低（表2）；Ea花环含量明显低于正常值，Es花环含量略高于正常值（表3）。提示慢性肾小球肾炎脾肾气阴两虚证的物质基础，可能与细胞内环核苷酸双向控制系统失调、免疫功能紊乱有关。

二、益气养阴法治疗慢性肾小球肾炎脾肾气阴两虚证的作用机理：益气养阴法是通过调整气（阳）、阴的失调，而达到治病效果，这与细胞内环核苷酸、免疫的双向调节函义相符，本组治疗前后对血浆环核苷酸、免疫含量变化的观察亦证实了这点。经用益气养阴法治疗后，随着体内气（阳）、阴虚得到调整，使血浆环核苷酸、免疫的双向调节渐趋平衡，血浆cAMP、cGMP含量基本降至正常，cAMP/cGMP含量比值升高；免疫球蛋白IgG含量明显提高，细胞免疫Ea花环含量上升，Es花环含量恢复正常；治疗前后对比，差异均有非常显著性意义（$P<0.01$）。提示益气养阴法治疗慢性肾小球肾炎脾肾气阴两虚证，可能有双向调节细胞内环核苷酸及免疫功能的作用。

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贵州省绥阳县医学会设立中西医结合学术组

为了适应我国中西医结合事业发展的需要，贵州省绥阳县医学会于1985年12月6日召开了第二届会员大会，会议选举了新的理事会，通过新的会章，并通过了关于设立中西医结合学术组和其他学术组的决定。

县级医学会是一个综合性的基层学会，包括医疗卫生防疫、妇幼保健和计划生育等，过去由于没有设立专科学术组，中医、中西医结合以及西医各科均无专人负责，无法开展学术活动。为了改变这种状况，更好的适应当前振兴中医和发展中西医结合事业的需要，这次会议决定设立中医、中西医结合以及其他各科学术组，明确了各组组长，从而保证了各类专业的学术活动。根据我县具体情况，按照普及与提高相结合，以普及为主的原则开展学术活动，为迅速推动全县区乡医院中西医结合工作的开展创造了条件。

（袁祥云）

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Clinically it was observed that after the treatment the disease was not so active as before with a reduction of the disease activity score from 68 to 42.5 points (38.22% diminished). Analysis according to clinical symptom and traditional Chinese symptom-complex revealed some improvement in 24 cases, no change in 14, and exacerbating in 3 patients. The above data indicated that SPGF might elevate both specific and non-specific immunity. For SLE patient with lowered cell mediated immunity and excessive humoral immunity SPGF has its beneficial as well as adverse effects. The authors stress that in treating diseases like SLE, the administration of tonics should be done according to the symptom-complex and disease differentiation, and based on the data of clinical and laboratory findings.

(Original article on page 157)

A Comparative Study of Thyroid Axis Functioning in Chronic Bronchitis Patients with Deficiency of Kidney Yang or Kidney Yin

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Concentrations of T_4, T_3, TSH in serum and T_3 RUR were examined to study the functioning of thyroid axis of chronic bronchitis patients with deficiency of Yang or Yin of the kidney and patients with deficiency of kidney Yang or Yin yet without obvious symptoms of chronic bronchitis. We found that concentrations of T_3, T_4 in serum of chronic bronchitis patients with deficiency of kidney Yang and patients simply with deficiency of kidney Yang were lower, and the concentration of TSH in serum slightly increased. Our results suggest that the decline of thyroid function is a basic factor of deficiency of kidney Yang and the total concentration of T_4, T_3 and the concentration of TSH may serve as an indicator of deficiency of kidney Yang.

Although the total concentration of T_4 in serum in chronic bronchitis patients with deficiency of kidney Yin is obviously higher than that of the patients with deficiency of kidney Yang ($P<0.01$), the value of T_4 in most of the cases was in the upper range of normal control group. The total concentration of T_3 showed no significant difference between group investigated and the control group ($P>0.05$). We have not got enough evidence to demonstrate that deficiency of kidney Yin is thyroidism. Deficiency of kidney Yang and Yin in patients with chronic bronchitis and in the patients without symptoms of the disease is one and the same syndrome appearing separately at different stages of development of the same disease. It indicates that "syndrome" in TCM is not "disease" in western medicine. Syndrome is pathological phenomenon appearing at certain stage of a disease. This study confirms the TCM theory of the importance of differentiation of symptom complexes while treating a disease.

(Original article on page 160)

Preliminary Observation on Cyclic Nucleotide and Other Immunological Parameter Changes in Treating Chronic Glomerulonephritis with "Replenishing Qi and Nourishing Yin" Principle —A Study of 41 Cases

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In recent years, the incidence of chronic glomerulonephritis with deficiency of both Qi (vital energy) and Yin (vital essence) seems to be higher than before, and it almost constitutes 30～35% of the patients. In order to explore the material base of this symptom-complex and the mechanism of "replenishing Qi and nourishing Yin", plasma cAMP, cGMP, serum IgG, IgA, IgM as well as Ea, Es rosette were investigated before and after treatment in hospitalized patients.

Before treatment, plasma cAMP and cGMP levels were obviously higher than normal, while the ratio of cAMP/cGMP significantly lower, $P<0.01$; serum IgG level was much lower than the normal, however, no change of IgA and IgM occurred; Ea rosette level was markedly under the normal, and Es level, slightly higher than it.

The effective rate of this therapy was 90.24%. After treatment, all of the plasma cAMP, cGMP, IgG, Ea and Es rosette levels normalized gradually; the difference of pre- and post-treatment was significant ($P<0.01$).

This suggests that the substantial base of chronic glomerulonephritis with deficiency of both Qi and Yin might be closely related to the dysfunction of bi-directional regulating system and the disturbance of immunological function. The mechanism of this therapy probably is due to its regulating function in modulating the intracellular cyclo-nucleotide and immunological disturbances.

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Immunological Function of 51 Cases of Hematological Disorders with Deficiency of Blood Patients

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Deficiency of blood patients usually have a remarkably lowered resistance against diseases and are susceptible to microbial infection, which is due to granulocytopenia and possibly upset of immunological function. This paper presents the results of a study of 51 cases of patients suffering from aplastic anemia, acute leukemia and iron deficiency anemia. Hemoglobin was below 9g% in all cases. Patients with aplastic anemia showed defects chiefly in lymphoblast transformation, IgG and IgA determination. Both systems of immunity were defective, but more prominant in humoral immunity. Patients of acute leukemia had defects in lymphoblast transformation, E-RFC and IgM, which was more outstanding in cellular immunity. While the immunological changes of the iron deficiency anemia patients were insignificant statistically. The therapeutic response of acute leukemia patients with higher IgM levels was more favorable than those with lower ones.

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