阳虚患者单个核及多形核白细胞糖皮质激素受体改变

第二军医大学长海医院内分泌科(上海 200433) 张家庆 刘志民*

内容提要 本文在过去测定阳虚患者混合白细胞中糖皮质激素受体(GCR)的基础上，进一步测定这类患者的单个核白细胞(MNL)及多形核白细胞(PML)的GCR。结果发现6例阳虚患者MNL的GCR和PML的GCR各为3473±413($\bar{x}\pm S$，下同)及4433±651位点细胞，与对照组(相应为4462±962及5622±782位点/细胞)相比有显著差异($P<0.05$)。同一患者分别测定MNL、PML及混合白细胞的GCR也都是相应降低，具体数字各为3369±370、4986±419及4524±852位点/细胞(5例)，其中MNL的GCR较低，PML的较高，而混合白细胞的GCR居中。因此，作者认为，混合白细胞的GCR是可以反映阳虚患者GCR的变化的。

关键词 糖皮质激素受体 阳虚 白细胞

阳虚患者往往有下丘脑-垂体-肾上腺皮质轴功能紊乱。而且我们曾测定过“阳虚”动物模型肝胞液以及阳虚患者混合白细胞中糖皮质激素受体(GCR)，发现都是降低的[1,2]。由于国外一般都是测定单个核白细胞(MNL，包括淋巴细胞和单核细胞)的GCR，而且MNL的GCR和多形核白细胞(PML)的GCR数目可能不同，因而和混合白细胞的GCR数也有不同，所以我们又分别测定了阳虚患者这几种细胞的GCR，并进行了比较，报告如下。

对象和方法

一、研究对象

1.阳虚组29例，男12例，女17例，年龄平均40.6(19～77)岁。临床辨证按照1986年郑州会议的标准[3]。西医诊断为内分泌疾病者13例，其中席汉氏综合征5例，尿崩症及侏儒症各2例，甲状腺功能减退3例，糖尿病1例；非内分泌疾病16例，其中哮喘4例，慢性结肠炎3例，慢性支气管炎2例，支气管扩张咯血、肺囊肿继发感染、急性心肌梗塞、风湿性心脏病、尿毒症、特发性浮肿及慢性胰腺炎各1例。其所以选择这么多不同的疾病是为了避免单一西医病种所造成的检查结果偏差，类似于异病同治之意。其中6例测MNL及PML的GCR，6例中有5例同时测定了混合白细胞的GCR，另23例仅测混合白细胞GCR。

2.正常对照组70名，男33名，女37名。年龄平均40.1(21～70)岁。均无心、肝、肺、肾及内分泌疾患，未服过皮质激素类药物。其中45名测MNL及PML的GCR，25名测混合白细胞的GCR。

二、方法

1.血浆皮质醇测定：用放射免疫测定法。

2.外周血白细胞GCR测定：应用放射配体结合测定法。混合白细胞GCR基本上按田英法[4]。MNL及PML的GCR测定详见另文[5]。

结 果

一、血浆皮质醇浓度：阳虚组29例及对照组70名分别为10.7±7.1和16.1±5.4μg/dl($\bar{x}\pm S$)差异显著($P<0.01$)。性别、年龄及内分泌与非内分泌疾病间无明显差异（见表1～4）。

二、白细胞GCR测定：结果见表1、2。阳

*现在长征医院

虚组与对照组差异显著($P<0.05$)。性别、年龄及是否内分泌疾病间比较见表2～4。5例病人同时作混合白细胞和MNL及PML的GCR测定结果见表5，都是相应降低。

表1 阳虚患者血皮质醇及MNL PML的GCR测定

($\bar{x}\pm S$，下同)

	例数	血皮质醇 (μg/dl)	MNL GCR (位点/细胞)	PML GCR (位点/细胞)
阳虚组	6	6.5±2.9*	3473±413*	4433±651*
对照组	45	16.8±7.2	4462±962	5622±782

注：两组比较 *$P<0.05$

表2 阳虚患者血皮质醇及混合白细胞GCR测定

	性别	例数	血皮质醇 (μg/dl)	混合白细胞GCR (位点/细胞)
阳虚组	男	12	12.0±6.1*	3654±1217*
	女	16	9.4±7.3**	3891±1326*
对照组	男	11	14.2±7.1	4894±987
	女	14	15.8±6.4	5022±1324

注：与同性别对照组比较 *$P<0.05$ **$P<0.01$

表3 不同年龄组阳虚患者混合白细胞GCR测定

	组别	例数	血皮质醇 (μg/dl)	混合白细胞GCR (位点/细胞)
≤40岁	阳虚	16	11.4±8.1*	3296±1138*
	对照	14	16.2±6.3	5387±2033
>40岁	阳虚	12	9.8±3.4*	4326±1593
	对照	11	12.1±5.1	4527±1138

注：与同一年龄对照组比较 *$P<0.05$

表4 阳虚的内分泌疾病与非内分泌疾病混合白细胞GCR测定

组别	例数	血皮质醇 (μg/dl)	混合白细胞GCR (位点/细胞)
阳虚(内分泌病)	13	10.8±8.1*	3395±1312*
阳虚(非内分泌病)	15	9.7±8.3*	3501±1428*
对照	25	15.4±5.8	4932±1824

注：与对照组比较 *$P<0.05$

表5 阳虚患者MNL及PML的GCR与混合白细胞GCR比较

组别	例数	GCR(位点/细胞)		
		MNL	PML	混合白细胞
阳虚	5	3369±370*	4986±419*	4524±852*
对照	45	4462±962	5622±782	4932±1824

注：与对照组比较 *$P<0.05$，(25名)

讨　论

由于混合白细胞的GCR易受白细胞分类计数变化的影响，故国外多主张测定MNL的GCR。我们测定MNL的GCR的结果，不论是阳虚患者还是正常对照，都比PML的GCR为低，并呈成比例的降低。而混合白细胞的GCR数则介于两者之间，基本上与白细胞分类计数的比例吻合。阳虚患者的三种白细胞GCR数以MNL的降低最明显，故最好能测定MNL的GCR，反映阳虚的变化比较灵敏。如因条件所限只能测定混合白细胞GCR，则由于阳虚患者的白细胞分类比例一般无改变，故也是可以反映GCR变化的。

阳虚患者的血皮质醇平均浓度降低，但也有些患者并不低，甚至反而高。本组有2例甲状腺功能减退、1例哮喘和1例糖尿病，其皮质醇分别为27.6、28.7、25.4和25.7μg/dl，而GCR相应为2985、3520、2797和3144位点／细胞，都比正常值低。因此可以解释这些患者有肾上腺皮质功能不足的表现。

以年龄而分，40岁以下的阳虚患者GCR降低显著，而40岁以上者降低不显著，可能因正常人的GCR随年龄增长而有降低趋势。我们曾测定了27名60岁以上老人的GCR，也证明了这一点。本组阳虚患者，无论是否内分泌病，GCR均低于正常对照组。说明GCR降低是阳虚证的共性，并不是因为内分泌疾病所引起。而且29例病人分属于15个病种，可以除外因某些病种对测定结果的影响。

参 考 文 献

1. 张家庆，等。"阳虚"动物模型肝胞液糖皮质激素受体改变及助阳药的作用。中西医结合杂志 1984；4(2)：107。
2. 张家庆，等。阳虚患者白细胞糖皮质激素受体的初步研究。中西医结合杂志 1987；7(11)：658。
3. 沈自尹，等。中医虚证辨证参考标准。中西医结合杂志 1986；6(10)：598。
4. 田　英，等。人周围血白细胞糖皮质激素受体的测定。中华核医学杂志 1983；3(1)：27。
5. 刘志民，等。人马型血单个核及多形核白细胞糖皮质激素受体的测定及其临床意义。中华内分泌代谢杂志 1989；5(2)：84。

Fifteen-Year Observation and Relative Research Between Identification and Treatment According to TCM on Serum Lipid of 54 Cases

Bao Jun(鲍 军), Luo Jianguo(楼建国), et al
Research Laboratory of TCM, Second Affiliated Hospital of Zhejiang Medical University, Hangzhou (310009)

The increasing rate of cholesterol (CH) of 54 cases with coronary heart disease was 33.33%. According to CH level, the authors divided them into two groups: the normal one (I) and the high one (II). By fifteen-year observation, CH of Group I kept normal, only with its triglyceride (TG) a little higher than ordinary level. But the CH and TG of Group II, which had been treated with anticholesteremic drugs, was obviously higher than Group I ($P<0.05$). In connection with identification according to TCM, both CH and TG of deficiency of Yang(阳), and deficiency of both Yin(阴) and Yang were higher, especially TG ($P<0.01$). TG of the type of blood stasis was higher ($P<0.01$) except anticholesteremic drugs for Group II. The two groups were treated with the same combined treatment of TCM and WM. The long term effect of fifteen years in Group I was more obvious than in Group II. This showed that the treatment of high serum lipid of CHD was more difficult.

(Original article on page 206)

Study on the Role of Qi(气)Reaching to Affected Area by Acupuncture in "Promoting Blood Circulation to Remove Blood Stasis"

Cheng Lianhu(程连瑚), Wu Kaiji(吴开基), Qie Zengwang(郄增旺), et al
Baoding District Hospital of TCM, Baoding (071000)

In the present work, an experimental observation was carried out with the determination method of bioelectric impedance in 78 cases of chronic hepatitis, 58 cases of chronic obstructive pulmonary disease; 45 of obstructive thromboendarteritis and 65 of coronary heart disease, who were diagnosed definitely and possessed the symptoms and signs of blood stasis and produced change in hemodynamics.

Yanglingquan(G. B. 34) and Zhangmen (Liv. 13) acupoints on right side were needled and four indices of liver blood circulation were determined for chronic hepatitis. Bilateral Kongzui (Lu. 6) acupoints were needled and seven indices of lung blood circulation were detected for chronic obstructive pulmonary disease. Acupoint along the pathway of channel were needled and six indices of blood circulation in the extremities were examined for obstructive thromboendarteritis. Bilateral Neiguan (P. 6) acupoints were needled and four indices of the cardiovascular function were detected for coronary heart disease. Results showed 95 cases of the above four diseases having Qi reaching to afffected area. 84 cases had propagated sensation along the channel. 67 cases had local sensation. Experimental results indicated that Qi reacing affected area produced obvious effects of dredging the meridian passage, and promoting blood circulation to remove blood stasis.

(Original article on page 209)

Glucocorticoid Receptors on Human Peripheral Mononuclear and Polymorphonuclear Leucocytes: Changes in Patients with Yang(阳)-Deficiency

Zhang Jiaqing(张家庆), Liu Zhimin(刘志民)
Department of Endocrinology, Changhai Hospital, Second Military Medical College, Shanghai (200433)

It was found that, in former works, the glucocorticoid receptors (GCR) on peripheral mixed leucocytes in patients with Yang-deficiency were decreased. In this work, the mixed leucocytes were further separated into mononuclear (MNL) and polymorphonuclear (PML) leucocytes, and GCR were determined in each part of leucocytes. GCR on MNL and PML in 6 Yang deficient patients were 3473±413 and 4433±651 sites/cell respectively, statistically significant from the normal control group (4462±962 and 5622±782 sites/cell respectively, $P<0.05$). GCR on MNL, PML and mixed leucocytes in 5 patients were determined simultaneously, and all lowered from the control group. The results were 3369±370, 4986±419 and 4524±852 sites/cell respectively, with the lowest GCR on MNL and highest on PML.

(Original article on page 215)