

长寿灵冲剂对动脉粥样硬化患者 免疫功能的影响

微生物教研室 李 蓉* 张德山 王桂山
黑龙江中医学院 附属医院内科 刘元章

内容提要 本文对50例动脉粥样硬化患者进行了中药长寿灵冲剂治疗前后免疫功能的观察,发现患者治疗前血清循环免疫复合物含量明显高于健康人,其中与健康人比IgG和IgA含量, $P < 0.001$, IgM含量 $P < 0.05$, C_3 含量、K细胞的抗体依赖细胞介导的细胞毒活力, T淋巴细胞转化率及E花环形成率均明显低于健康人($P < 0.001$)。长寿灵治疗后患者上述紊乱的免疫指标均恢复至正常水平,说明长寿灵对动脉粥样硬化患者的免疫功能紊乱有良好的调节作用。

本文报道长寿灵冲剂对动脉粥样硬化(Atherosclerosis, As)患者免疫功能的影响,通过临床实验,获得了有意义的结果。

资料和方法

一、对象分组及方法

1. 观察组50例,男40例,女10例。平均年龄 53.00 ± 8.13 岁。系本院内科住院患者。口服由本院附属医院药厂制备长寿灵冲剂。组成:黄芪25g 黄精15g 何首乌25g 刺五加25g 紫河车25g 枸杞子15g 玉竹15g。共研成细粉。每日3次,每次15g。30天为1疗程。每例疗程前后均作免疫指标测定,以作自身对照。

2. 对照组50例,男36例,女14例。平均年龄 53.42 ± 5.78 岁。为健康人。本组不作任何处理。作免疫指标检测。

二、检测方法

1. 人外周血淋巴细胞转化试验⁽¹⁾:取外周血肝素抗凝,以植物血凝素(PHA,广州医工所产)为刺激原,其最终浓度为 $25 \mu\text{g}/\text{ml}$,培

养(37°C 、5% CO_2 环境)56小时后,各管分别加入 ^3H -TdR 0.1ml,使其最终浓度为 $0.6 \mu\text{Ci}/\text{ml}$,多头细胞收集器收获样品,测cpm,结果以刺激指数(SI)表示。

2. E花环形成试验:采用全国规定统一方法。

3. 血清免疫球蛋白(Ig)和补体3(C_3)含量测定:采用单向琼脂扩散法,免疫板为北京生物制品研究所制。

4. 血清循环免疫复合物(CIC)中Ig含量测定⁽²⁾:待测血清与等量0.8%PEG-6000溶液于 4°C 作用后, 4°C 1000g离心,沉淀物以0.1ml PBS溶解,单扩散法测定CIC中IgG、IgA、IgM含量;同时测定同一份血清中Ig含量。结果以PEG沉淀物中Ig含量占其血清中Ig含量的百分率表示。

5. K细胞的抗体依赖细胞介导的细胞毒(ADCC)活力检测⁽³⁾:每毫升洗涤过的鸡红细胞(CRBC)悬液(含 2×10^8 细胞)中加入 $\text{Na}^{51}\text{CrO}_4$ 溶液0.2~0.4mCi,置 37°C 温育1小时,经充分洗涤后调细胞浓度为 1×10^7 细胞/ml、放射性强度为 $1 \sim 2 \times 10^5 \text{cpm}/\text{ml}$,即为 ^{51}Cr 标记的靶细胞悬液。将 ^{51}Cr -CRBC靶细胞悬液与兔抗CRBC血清(自制、凝集效

* 现在哈尔滨医科大学公共卫生学院卫生微生物教研室

价1:128, 试验时做最适浓度稀释)及待检人外周血单个核细胞等量混匀, 以RPMI1640培养液补足2 ml, 37°C温育5小时, 离心, 取定量上清液, 分别测定上清液和残留液的cpm, 换算ADCC活力(^{51}Cr 释放百分率)。每次试验均设抗血清对照管、自然释放管和最大

释放管。每次标记CRBC时均校正 ^{51}Cr 原液的放射性总强度。

结 果

各项免疫功能测定结果: 见附表。

实验结果表明, As患者免疫功能是紊乱

附表 长寿灵对As患者免疫功能的影响 (M±SD)

	淋转率(SI)	E花环(%)		CIC中Ig(%)			$\text{C}_3(\mu\text{g/ml})$	ADCC(%)	P值
		E_1	E_a	IgG	IgA	IgM			
对照组 (50)	157.83±12.04	74.85±6.80	41.87±5.01	2.3±0.5	2.1±1.0	35.3±8.1	391.45±68.67	34.17±5.42	<0.001
观察组 (50)	73.56±30.08	51.06±10.88	21.86±4.63	4.9±0.6	5.3±4.2	44.3±8.7*	276.60±83.43	27.97±11.18	
观察组 (50)	145.84±20.57	67.67±12.13	44.54±10.37	2.4±0.5	2.3±1.5	35.5±10.10	374.40±58.93	35.06±6.16	<0.001

注: *与对照组比 $P<0.05$; ()内为例数

的, 表现为淋转率、E花环形成率、 C_3 含量、K细胞ADCC活力均明显低于健康人 ($P<0.001$)。CIC含量明显高于健康人, 其中IgG、IgA与健康人比 $P<0.001$, IgM与健康人比 $P<0.05$ 。经长寿灵治疗30天后, 其CIC含量明显降低, 与正常组比 $P>0.05$; 其淋转率、E花环形成率、 C_3 含量、K细胞ADCC活力均明显升高, 与正常组比 $P>0.05$ 。以上表明, As患者经长寿灵治疗后, 其紊乱的免疫状态得到了全面纠正。As患者血清Ig含量在服药前后无改变, 均处于正常范围。

讨 论

本工作表明老年前期As患者的免疫功能是紊乱的, 调整这种紊乱状态对临床治疗是有意义的。在As的发病过程中, 心、脾、肾三脏为病之本, 气滞血瘀、痰积是病之标。由于心、脾、肾的亏损, 导致气滞血瘀、痰浊内生、脉络不通, 而年老体衰, 肾气不充尤为其首。据此, 我们选用了具有补肾益气、填精生髓、延年益寿、消痰浊之功的中药长寿灵进行治疗。结果表明, 该方对As患者的免疫紊乱有较好的调节作用, 能够增强患者的细胞免疫功能, 提高淋转率、E花环率、K细胞ADCC活力及 C_3 含

量, 并能降低患者CIC含量, 这与该方中大多数药物具有免疫增强或免疫调节作用有关。如方中主药黄芪对某些慢性病患者的细胞免疫有较强的增强作用^[4], 在提高小鼠单核吞噬细胞系统吞噬血浆脂蛋白的作用方面, 超过卡介苗^[4]。方中刺五加有较好的抗非细菌性炎症的作用, 可减轻由生理盐水和15%蛋白液引起的炎症^[3]。何首乌具有肾上腺皮质激素样作用, 可通过“神经-体液”调节系统调节免疫等。由此可见, 中药的作用可能是通过多种机理来实现的, 而且多是通过机体固有的调节系统向着有利于健康的方向发挥作用, 达到“阴阳平衡”。目前老年人多患有As病, 长寿灵为无副作用且具有疗效的中药冲剂, 服用方便, 有利于临床应用。我们认为, 利用中医药纠正某些疾病的免疫紊乱并探讨其作用机理, 对中医理论的发展和临床医疗实践都是有意义的。

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Use of Qi(气)-Replenishing and Stasis-Removing Herbs in Treating Patients with Heart Failure of Qi(气)Deficiency and Blood Stasis Type

Zhu Boqing (朱伯卿), Dai Ruihong (戴瑞鸿), et al

Hua Shan Hospital, Shanghai Medical University, Shanghai

There were 52 cases with heart failure of Qi deficiency and blood stasis type. Group A consisted of 8 cases monitoring cardiac hemodynamics by Swan-Ganz catheter. After intravenous injection of *Astragalus membranaceus*, *Codonopsis pilosula* and *Astragalus*, and *Salvia miltiorrhiza*, the cardiac index, cardiac output, stroke volume and stroke index were increased in the former two groups, but not after *Salvia* injection. Group B consisted of 44 cases which was given intravenous dripping of *Salvia* (24 gm / day) for 2 weeks, then added injection of *Astragalus* (24 gm / day) for 2 weeks. After therapy not only the clinical cardiac performance, PEP / LVET, severity of Qi deficiency and blood stasis were improved. Besides, the platelet aggregation function was markedly inhibited. According to experimental study of contraction curves of isolated papillary muscle of rabbits' heart, the results showed that *Astragalus* had positive inotropic effect and *Salvia* had no such effect. The synergistic effect of these two herbs can be demonstrated. The results of clinical and experimental study indicated that *Astragalus* and *Salvia* have synergistic effect. So the article supports the traditional theory of correlation between Qi and blood.

(Original article on page 591)

Influence of Changshouling (长寿灵) on Immune Functions in Atherosclerosis Patients

Li Rong (李蓉), et al

Dept. of Microbiology, Heilongjiang College of TCM, Harbin

The influence of Changshouling, a patent drug composed of Chinese herbal drugs, on immune functions in 50 cases with atherosclerosis (As) was reported. The results indicated that there were disturbances of immune functions in the As patients. The contents of circulatory immune complex (CIC) in serum were markedly higher than those of the normal control ($P < 0.001$). Meanwhile, the levels of C₃, the antibody dependent cell-mediated cytotoxicity (ADCC) activity of NK cell and the percentage of E-rosette forming cells were markedly lower than those of the normal control ($P < 0.001$). The immuno-disturbances restored to normal levels following one-month treatment with Changshouling. These results indicated the Changshouling played an important role in adjusting the immunodisturbances in patients with As and suggested that Changshouling is a satisfactory immuno-adjusting medicine.

(Original article on page 594)

An Observation on the Effect of Pearl Layer Powder on Serum LPO and Lipids in CHD Patients

Huang Yuanwei (黄元伟), et al

Dept. of Cardiovascular Research, 1st Affiliated Hospital of Zhejiang Medical University, Hangzhou

Group A, 20 cases of coronary heart disease (CHD) treated with pearl layer powder (PLP) for the observation of the effect on serum LPO and lipids, while 17 cases of CHD using placebo only for control group (B). Group A treated with PLP showed significant reduction of serum LPO after administration of a course (1 month) of PLP ($P < 0.01$), but group B using placebo showed no significant effect ($P > 0.05$). There was significant difference between two groups treated with X² test. There was no significant difference on serum lipids including total cholesterol, triglyceride and HDL-ch. The authors suggested that PLP might have certain preventive effect on coronary heart disease.

(Original article on page 596)

404 Mixed Hemorrhoid Patients Treated with External Excision and Internal Separation with High Ligation

Zhou Xinghua (周醒华)

Dept. of Ano-Rectal Surgery, Hangzhou Railway Hospital, Hangzhou

According to the main principles of Milligan's Hemorrhoidectomy integrated with the TCM method of high ligation of internal hemorrhoid, 404 cases of mixed hemorrhoid were treated. 320 were male and 84 female. This new therapy applied from 1967 to 1985 was proved to be simple, practical, and the operation time was shortened. It caused less pain, few complications, and only one operation instead of staged operations were necessary. There were 278 cases with mixed hemorrhoid, 49 wreath shaped mixed hemorrhoid, 44 complicated with anal fissure, 18 with ano-fistula, 15 with hypertrophy of anal papillae and 15 cases with previous hemorrhoidectomy history. Operation procedure: It consists of external hemorrhoidectomy, separation of internal hemorrhoid with high ligation at its pedicle, and local infiltrative injection with "procaine methylene blue". Postoperative complications such as urine retention, pain, difficulty in defecation