

# 气滞血瘀型冠心病患者的血脂变化

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**内容提要** 本文旨在说明冠心病中医辨证分型与生化检查的关系。将 88 例冠心病患者按照中医辨证分为气滞血瘀型与非气滞血瘀型。检测其血脂, 结果为血清总胆固醇、红细胞胆固醇、甘油三酯含量气滞血瘀型均高于非气滞血瘀型, 尤其是甘油三酯含量普遍升高 ( $P < 0.001$ ); 高密度脂蛋白胆固醇含量明显地低于非气滞血瘀组 ( $P < 0.001$ )。可见, 甘油三酯或高密度脂蛋白胆固醇含量变化是易于构成中医气滞血瘀的生化基础。

中医理论对冠心病的舌、脉、证进行辨证分析的结果说明, 冠心病属于本虚标实, 标实以瘀血及痰浊阻滞为主, 本虚则以气虚为主, 可兼有阳虚或阴虚。冠心病的基本病变是“心脉不通”“胸阳痹阻”“气滞血瘀”, 病变部位主要在心, 有报告冠心病气滞型占 88%, 只要辨证为气滞血瘀, 则血清甘油三酯含量均增高<sup>(1)</sup>。

本文进一步证实冠心病气滞血瘀型确实伴有血清甘油三酯的增高, 血清高密度脂蛋白胆固醇含量下降, 红细胞胆固醇含量升高, 为冠心病辨证论治提供参考。

## 研究方法

一、冠心病 88 例, 其中男 30 例, 女 58 例; 年龄 45~65 岁。根据 1977 年中西医结合防治研究冠心病中医辨证参考标准及 1979 年上海会议订, 冠心病心绞痛及常见心律失常的诊断和疗效评定标准, 进行诊断和中医辨证分型, 54 例气滞血瘀型具备以胸闷憋气、胸前闷痛、刺痛交作, 舌质暗红或舌边尖有瘀点、瘀斑或发紫, 脉沉涩或结、代等; 33 例非气滞血瘀型(气虚血瘀型)都有程度不同的心绞痛、胸闷气短、

乏力易汗、心悸头晕、脉沉细或结、代等。

二、血脂测定: 1. 血清总胆固醇 (TC) 含量测定: 邻苯二甲醛法<sup>(2)</sup>。

2. 红细胞胆固醇含量测定: 醋酸乙酯, 无水乙醇抽提, 邻苯二甲醛法<sup>(3)</sup>。

3. 血清甘油三酯 (TG) 含量测定<sup>(2)</sup>: 正庚烷—异丙醇—乙酰丙酮显色法。

4. 高密度脂蛋白—胆固醇 (HDL-C) 含量测定: 磷钨酸钠—氯化镁沉淀法<sup>(4)</sup>。

5. 低密度脂蛋白—胆固醇 (LDL-C) 含量测定<sup>(5)</sup>: 按 Friedewald 公式  $LDL-C = TC - (\frac{1}{5}TG + HDL-C)$  计算。

6. 致动脉粥样硬化指标:  $AI = TC - HDL-C / LDL-C$  作为 VLDL 和 LDL 中胆固醇对 HDL-C 的比值。

7. 红细胞压积: 用 Wintrobe 管离心血液后测出。

## 结果

### 一、气滞血瘀型的血脂变化

气滞血瘀型冠心病患者 54 例, TG 明显增高, HDL-C 含量明显降低, TC 含量、红细胞

表 1 气滞血瘀和非气滞血瘀组血脂变化 (mg%  $M \pm SD$ )

组 别	例 数	TC	红细胞胆固醇	HDL-C	TG
气滞血瘀	54	199.80 $\pm$ 43.72	229.37 $\pm$ 49.96	65.50 $\pm$ 15.00 $\Delta$	239.20 $\pm$ 98.00 $\Delta$
非气滞血瘀	33	188.00 $\pm$ 40.50	224.60 $\pm$ 53.00	77.00 $\pm$ 19.90	96.27 $\pm$ 28.27

$\Delta$  与非气滞血瘀组比较  $P < 0.001$

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胆固醇含量均变化不大(见表1)。结果表明各项指标中以TG及HDL-C水平与气滞血瘀关系较为密切。

## 二、HDL-C与TG含量的相关关系

气滞血瘀组 HDL-C 含量为  $65.5 \pm 15.0\text{mg}\%$ , 非气滞血瘀组为  $77.0 \pm 19.9\text{mg}\%$ , 两组之间含量有明显差别 ( $P < 0.001$ ), HDL-C 水平和 HDL-C/LDL-C 比值均较非气滞血瘀组明显为低。致动脉粥样硬化指数(AI)升高与 HDL-C 水平下降有关。气滞血瘀型冠心病 TG 含量明显增高 ( $P < 0.001$ ), HDL-C 与 TG 含量之间呈负相关(相关系数  $r = -0.199, P > 0.05$ )。结果表明, 高密度脂蛋白胆固醇不仅对胆固醇的代谢有促进作用, 对血清甘油三酯的代谢也有明显的影响, 见表2。

表2 HDL-C与TG含量水平比较(mg% M $\pm$ SD)

	气滞血瘀组(54例)	非气滞血瘀组(33例)
HDL-C	$65.50 \pm 15.00^*$	$77.00 \pm 19.90$
LDL-C	$88.70 \pm 34.60$	$91.30 \pm 38.00$
HDL-C/TG	0.33	0.41
HDL-C/LDL-C	0.74	0.85
AI	$2.14 \pm 0.72^*$	$1.56 \pm 0.76$
TG	$239.20 \pm 98.00^*$	$96.27 \pm 28.30$

\* 与非气滞血瘀组比较  $P < 0.001$

## 讨 论

一、本文结果表明冠心病气滞血瘀患者血清脂类较非气滞血瘀组均有显著差别, 提示甘油三酯含量升高及高密度脂蛋白—胆固醇含量降低是形成冠心病气滞血瘀的主要生化物质基础, 与文献报道相符<sup>(1,6)</sup>。近年来对甘油三酯诊断动脉硬化的价值越来越受到重视, 甘油三酯的增多大多属于高脂蛋白血症 II b 与 IV 型, 这两型都是冠心病的易患因素, 尤其是 IV 型常常合并糖耐量的减低, 极易导致动脉硬化。气滞血瘀伴有甘油三酯升高, 说明脂质代谢紊乱较重。测定酯类代谢状况可作为血瘀的一种客观指标。

二、根据冠心病的症状和临床观察, 一部分冠心病病人是因为气虚, 气不能推行血液运行, 血流不畅, 则形成胸闷、胸痛、气短、憋气、自汗、脉细、舌质紫暗等症。从病理生理上看, 气虚则血流缓慢, 血液运行滞涩, 最后形成血瘀。其生化基础, 从我们的实验结果初步认为是脂质代谢紊乱, 尤其是甘油三酯的含量明显升高, 高密度脂蛋白含量显著下降。另外, 我们又同步作了血液流变学观察, 血清甘油三酯升高的患者, 则血液粘度增高、红细胞及血小板电泳时间延长。这些实验表现, 常成为中医气滞血瘀的病理学基础。

三、有关实验研究表明<sup>(7)</sup>高密度脂蛋白—胆固醇含量低下与垂体功能有关。高甘油三酯与显著低下的高密度脂蛋白—胆固醇有关, 高密度脂蛋白—胆固醇具有对甘油三酯廓清和血清总胆固醇输运作用, 说明防御性的高密度脂蛋白—胆固醇低下和致病性的甘油三酯增多之间有一定关系, 亦对冠心病中医辨证分型的生化基础起了一定的作用。

(陈春梅同志参加本实验技术工作)

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## Abstracts of Original Articles

### Schönlein-Henoch Nephritis in Children Treated with the Method of Removing Heat and Activating Blood — A Report of 14 Cases

Shi Yumin (时毓民), Sheng Fangyun (盛芳芸), et al  
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This paper reports 14 cases of Schönlein-Henoch nephritis aged 4-12 years treated with the method of "removing heat and activating blood". The average course of treatment was six months. According to the severity of disease, the patients were divided into three groups: 1. mild, 2 cases; 2. nephritic syndrome, 10 cases; 3. nephritic-nephrotic syndrome, 2 cases. 13 patients showed apparent clinical recovering at the end of therapy. One patient clinically improved. Response to treatment usually became apparent after 0.75-3.25 months (average 1.7 months). 14 patients were followed up for 0.42-2.8 years (average 1.58 years) without relapse. The result was encouraging. It may be concluded from our study that Chinese traditional medicine alone can treat mild cases and nephritic syndrome successfully. But for nephritic-nephrotic syndrome, immunosuppressive drugs administered in combination with Chinese traditional medicine give better result.

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### Changes of Serum Lipid Level in the Cases of Coronary Heart Disease with the Energy Stagnancy and Blood Stasis

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In this paper, the relationship between types of coronary heart disease according to TCM theories and the used biochemical method has been investigated. According to different syndromes, 88 cases of coronary heart disease are grouped into two types: Qi Zhi Xue Yu (QZXY 气滞血瘀, energy stagnancy and blood stasis) and non-QZXY. By analyzing their serum lipid levels, it is found that levels of serum cholesterol, erythrocytes-cholesterol and especially triglyceride (TG,  $P < 0.001$ ), in patients with QZXY are higher than those in patients without QZXY. The contents of serum high-density lipoprotein are significantly lower than those in the non-QZXY group ( $P < 0.001$ ). Thus it is concluded that TG contents and high-density-lipoprotein contents are essential biochemical materials which lead to QZXY.

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### Analysis of Therapeutic Effect of 106 Cases of Chronic Gastritis Treated Mainly with the Method of Replenishing Qi (Vital Energy) and Reducing Blood Stasis

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This paper reports 106 cases of chronic gastritis mainly treated with the method of replenishing Qi (vital energy) and reducing blood stasis. 62 cases are superficial gastritis, 32 cases atrophic gastritis and 12 cases erosive gastritis. 54 cases (50.9%) showed marked effect, 40 cases (37.8%) improved and 12 cases (11.3%) showed no effect, the total effective rate being 88.7%. Gastrofibroscopy of 32 cases before and after the treatment revealed that 15 cases (46.9%) improved and 17 cases (53.1%) showed no effect and the biopsy of them found improvement in 17 cases (53.1%) and no effect in 15 cases (46.9%) after treatment and 3 cases of atrophic gastritis among them were found to have retrograded to superficial gastritis.

30 cases were chosen randomly as control group treated with dried yeast while the others were treated with Wei Yan An Wan (胃炎安丸, the method of replenishing Qi and reducing blood stasis). In the control group, only 2 cases (6.7%) were found improved and 28 cases ineffective, the total effective rate being 6.7%. The therapeutic effects between the two groups are obviously different ( $P < 0.01$ ).

The theory of blood stasis of the traditional Chinese medicine, its relationship with chronic gastritis, the changes in gastro-mucous membrane of blood stasis cases, as observed through gastrofibroscopy, and the mechanism of replenishing Qi and reducing blood stasis are discussed.

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