# 益气、活血方药对冠心病临床疗效观察

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内容提要 本文对 35 例冠心病 住院患者,先后交替静脉点滴益气液(26例次)、活血液(35例次)及益气液与活血液同用(19例次),各用药 2 周。采用单盲、自身先后对照的方法观察了对冠心病心绞痛的近期临床疗效。结果是心绞痛症状及心电图的总有效率分别为,益气组 76.1.9%、19.24%;活血组 85.71%、60%;益气活血组 75%、43.26%。三组间心绞痛症状的总有效率无明显差异;心电图的总有效率益气组低于活血组及益气活血组。

根据我们临床观察,应用中医理论对冠心病的舌、脉、症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,可兼有阻虚或阴虚。总的看来,气虚血瘀是基本的病机。基于上述认识,我们选择一组有明确 ST—T 心电 图改变的冠心病患者作为研究 对象,分别观察益气、活血方药对冠心病的临床疗效。

## 研究对象及方法

- 一、研究对象: 为冠心病心绞痛或陈旧性 心肌梗塞患者 35 例。诊断按上海会议 修 订 的全国统一标准。在同一患者先后采用不同的治疗方案,进行自身单盲对比观察不同方案的疗效,共80 疗程。所选病例均有明确的心 电 图 ST—T 改变。
- 二、研究方法:全部住院治疗。多数病例在入院后停药(入院前已服降压药者,则继续服用)观察3~5天,进行心电图及其他有关化验项目的检查。然后,选用下列方案之一分别进行治疗,每种药物加入10%葡萄糖注射液200 ml 静脉点滴,每日一次,或加入10%葡萄糖40 ml 静脉注射,每日一次。用药14天后停用,并进行疗效小结。然后在同一患者进行第二种或第三种方案进行治疗,每个治疗方案之间间隔3~5天(在这期间,停用有关治疗冠心病的中西药)。

- 1. 活血药组,选用 109 A 注射 液 者 26 例次。用 109 A 注射 液 20 ml (由丹参、赤芍、郁金,按 2:1:1 的比例,用水提醇沉法制成,每毫升相当于含生药 1 g);选用丹参注射液 9 例次。用丹参注射液(市售的制品)20ml。共计 35 例次。
- 2. 益气药组:选用 109B 注射 液者 10 例次,用 109B 10ml(由党参、黄芪、黄精、按1:2:1 的比例,用水提醇沉法制成,每毫升相当于含生药 1 g);选用生脉散者 16 例次,用生脉散注射液 10ml。共计 26 例次。
- 3. 益气活血药组,将上述益气活血药按原剂量在患者身上同时运用。选用109A+109B者13例次,选用生脉散+109A者6例次,共计19例次。

## 结果

经治疗后心绞痛症状有所减轻,持续时间缩短,发作次数减少以及停止发作者,均定为有效;经治疗后心电图 ST—T 与治疗前相比较有好转者,均定为好转;与治疗前相同定为无变化;与治疗前相比变坏者定为恶化。

经统计学处理,心绞痛的疗效在三组之间 无明显差异 (P>0.05)。但心电图的疗效三组 之间有明显差异 (P<0.05),活血药组与益气 药组之间有十分 显著 差异 (X<sup>2</sup>=10.12, P<0.01),活血药组与益气活血药组间 无明显差 异  $(X^2=0.79, P>0.05)$ , 益气药组与益气活血药组之间有明显差异 $(X^2=6.95, P<0.01)$ 结果见附表。

附表	疗效观察表
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组		别	活血药组	益气药组	益气活血药组
例		次	35*	26*	19*
心	有	效	24(85.7%)	16(76. 19%)	12(75%)
心绞痛	无	效	4(14. 29%)	5(23, 81%)	4(25%)
心电图	好	鞍	21(60%)	5(19. 24%)	9(43.36%)
	无多	赵化	10(28. 57%)	12(46. 15%)	5(26, 31%)
	恶	化	4(11. 43%)	9(34.61%)	5(26.31%)

\*在活血药物组 35 例次中有 7 例次治疗前后心 绞 痛 未 发作,故心绞痛的疗效仅按 28 例次统计,益气药组 26 例 次 中有 5 例次治疗前后心绞痛未发作,故心绞痛的疗效仅按 21 例次统计;益气活血药组 19 例次中有 3 例次治疗前后心绞痛未发作,故心绞痛的疗效仅按 16 例次统计。

## 讨论及小结

本文的结果初步说明活血、益气或益气活 血三种治则对心绞痛的疗效无明显的差异。心 电图的疗效在活血与益气活血之间也无明显的 差异。值得进一步探讨的是益气药组的心电图 变化。用益气药治疗后心电图呈"恶化"改变者 ST-T 呈鱼钩状下垂型压低, 其形 状 与 用 洋 地黄类药物治疗后的心电图改变极其相似, 因 此,这种心电图改变可能是益气药物对心肌复 极的影响所致。其理由是,我们曾观察到生脉 散注射液可以使冠心病患者 STI 的 PEP 缩短, LVET 延长, PEP/LVET 比值 变小, 说明可 以改善左心室功能,与西地兰对 STI 的作用相 似<sup>co</sup>。又据北京中医学院生化教研组的研究结 果表明生脉散对大鼠、豚鼠的心肌细胞膜 ATP 酶活性具有抑制作用(2), 也与洋地黄类强心 甙 的作用机理相一致。以上结果初步说明生脉散 具有与洋地黄类相似的正性肌力作用。此外, 我们还观察到不伴有休克的冠心病患者用生脉 散后,心率明显减慢,但血压不增加,从而有 减低心肌耗氧量的趋势(1)。临床上用益气药后 心绞痛症状多有好转,有 84.61%的病例 用生 脉散后感到全身舒适,精神及体力好转,没有

任何恶化的征象。根据以上分析我们初步认为 用生脉散之后心电图 ST-T 的改变很可能是 药物影响的结果,并不是用益气药后心肌缺 血、缺氧加剧的结果。其确切机理尚有待研究。

"益气摄血"是中医治疗气虚出血的主要治 则。那么益气药是否具有促凝血的作用?我们 曾观察过益气、活血及益气活血方药对冠心病 患者体内纤维蛋白溶酶活性的影响,结果表明 活血药提高纤溶酶的活性,而益气药则抑制其 活性<sup>(3)</sup>。西苑医院的实验研究结果也表明单用 益气的黄芪使优球蛋白溶解时间延长,纤维蛋 白稳定因子活性提高。此外,他们在研究益母 草、黄芪等药对血栓形成的作用时观察到用黄 芪后的血栓长度与用益母草后的血栓长度相比 明显增长<sup>40</sup>。以上结果使人想到黄芪等益气药 可能具有促凝作用。由于不少冠心病患者兼有 气虚的表现,益气是治疗冠心病常用的法则之 一。为此,益气药物对凝血及纤溶系统的作用 值得进一步研究,以便逐步阐明对冠心病患者 如何更恰当地应用益气药,用益气活血复方"抗 心梗合剂"对实验性犬急性心肌梗塞的研究,初 步证明抗心梗合剂具有使心肌梗塞范围缩小、 病变程度减轻、心肌细胞坏死量减少、保护心肌 超微结构等作用(5)。因此,根据现有的临床及 实验研究的资料, 我们认为对一般冠心病患者 可以活血为主进行辨证论治,当气虚明显,需 要用益气药时,与活血药同用可能更为有利。

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## Observation on Efficiency of Treatment in Coronary Heart Disease with Chinese Herbal Medicines of Yiqi and Huoxue

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35 patients with coronary heart disease were studied to compare the effectiveness of Yiqi (流气, reinforcing the vital energy), Huoxue (活血, invigorating blood circulation) and Yiqi-Huoxue therapeutic methods in the treatment of angina pectoris (single blind). The therapeutic procedures were as follows: (1) All 35 cases (Yiqi group) received Yiqi injection 10ml daily (consisting of three Chinese herbal medicines). (2) Five days after the course of Yiqi therapy, 26 of 35 cases (Huoxue group) received Huoxue injection 10ml daily (consisting of three Chinese herbal medicines). (3) Five days after Huoxue therapy, 19 of 35 cases (Yiqi-Huoxue group) also received both Yiqi and Huoxue injection, each 10ml daily. Every therapeutic method was given intravenously for 2 weeks. The results are as follows.

The effective rate for angina pectoris was 85.71% in Huoxue group, 76.19% in Yiqi group, and 75% in Yiqi-Huoxue group. The difference among the three therapeutic groups was not of statistical significance (P>0.05). The effective rate for ischemic ST-T changes was 60% in Huoxue group, which was significantly higher than 19.24% in Yiqi group (P<0.05), but the difference between Huoxue group and Yiqi-Huoxue group (43.3%) was not of statistical significance (P>0.05). The rate of ST-T segment deterioration after treatment was higher in Yiqi group (34.61%) than that in Huoxue group (11.43%, P<0.01), but the difference between Yiqi and Yiqi-Huoxue group was not statistically significant (P>0.05). All these findings suggest that the therapeutic efficacy was better in Huoxue group as compared to the other two groups. The authors point out that the mechanism of the S-T segment deterioration in Yiqi group needs further research. It might be caused by pharmacologic influence of the drug on the myocardium rather than by a deterioration of myocardial ischemia, since the pattern of change in S-T segment after Yiqi treatment was similar to the characteristic effect of digitalis on ECG.

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## A Preliminary Study of the Relationship Between Purple Tongue and the Hyperaggregability of Platelet

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The platelet aggregation was measured in 22 healthy adults, 22 healthy elders, 30 patients with transient cerebral ischemia and 44 patients with diabetes mellitus; meanwhile the tongue appearance of these subjects was observed. The platelet aggregation was measured with four methods, i.e. by means of aggregation by aggregating agents, spontaneous aggregation, circulating platelet aggregates and platelet electrophoresis.

The results of this study showed that the platelet aggregation and the incidence of purple tongue were significantly higher in the healthy elders than those in the healthy adults. The platelet aggregation and the incidence of purple tongue were significantly higher in the patients with diabetes mellitus or transient cerebral ischemia than those in the control groups. The changes of platelet aggregation had significant correlation with the changes of tongue substance either in the healthy subjects or in the patients with diabetes mellitus or transient cerebral ischemia.

The results reported here suggests that the formation of purple tongue is related to the hyperaggregability of platelet. Measurement of platelet aggregation and inspection of the tongue are useful methods in the diagnosis and treatment of blood stasis syndromes. Finally, the authors lay emphasis on the practical value of these methods in the clinical medicine.

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## The Effect of Chinese Medicine on IgG-Containing Plasma Cells and Peritoneal Mast Cells of Hydrocorticoid Mice

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148 normal male mice, each weighing 23-29g, were selected for this experiment. The model was induced in some mice by hydrocortisone acetate (the dosage was 1mg per animal per day). Some were treated with 0.5ml of Chinese medicines (i.e., Radix Aconiti Praeparata, Cortex Cinnamomi, Herba Epimedii, Radix Rehmanniae praeparata, Cornu Cervi and Radix Codonopsis Pilosulae, the dosage was altogether 0.25g) at the same time. The experiment lasted 7 days. After the last dose the animals were killed. The middle segment of the small intestine was stained by PAP immunohistochemical method to observe the IgG-containing plasma cells. The peritoneal mast cells were studied by cell counts and acridine orange vital staining method which was observed by a fluorescent microscope.

Changes of IgG-containing plasma cells: Brown-black granules are present in the plasma cell cytoplasm. There were moderate numbers of IgG-containing plasma cells in the lamina propria of the small intestine of the controls. These cells decreased in the mice treated with

hydrocortisone but increased markedly in those treated with Chinese medicines.