

方药研究

补益肝肾法对绝经后冠心病患者性激素水平及血脂代谢的影响

王秀宝* 张季青* 王文川* 张嘉男* 刘德桓*

摘要 目的:探讨性激素水平与绝经后妇女冠心病(CHD)和血脂代谢变化的相关性,以及补益肝肾法对上述指标的影响。方法:选择60例绝经后妇女CHD患者随机分为中药组和西药组各30例,分别给予补益肝肾法和尼尔雌醇治疗6个月,另设健康对照组30例,分别于治疗前、治疗3个月、6个月末抽血检测雌二醇(E_2)、总胆固醇(TC)、低密度脂蛋白胆固醇(LDL-C)。结果:(1)CHD组 E_2 水平显著低于正常对照组($P<0.01$)。(2)中药组治疗6个月后 E_2 逐渐上升($P<0.01$),LDL-C、TC明显下降($P<0.05$),与西药组比较无明显差异($P>0.05$)。(3)中药组治疗6个月后, E_2 水平上升,而TC水平下降,两者呈显著负相关($r_1=-0.905, P<0.01$); E_2 水平与LDL水平亦呈显著负相关($r_1=-0.909, P<0.01$; $r_2=-0.912, P<0.01$)。结论:妇女CHD发病与绝经后雌激素水平下降有关,其变化与中医肾虚有关。

关键词 冠状动脉疾病/中医药疗法 补益肝肾 性激素类/代谢

流行病学研究表明,绝经前妇女冠心病(CHD)的发病率仅为男性的1/10~3/10,但绝经后妇女CHD的发病及死亡率比绝经前上升了4倍,高于男性^[1]。绝经后妇女年龄每增加10岁,CHD的死亡率增加7倍^[2],而接受雌激素替代治疗可预防血脂紊乱、减少CHD的发生并降低其死亡率^[3]。表明由于雌激素水平的降低,使血脂、糖等的代谢异常,从而使CHD发病危险性明显增高。但有不少研究资料报告,雌激素替代疗法有诱发乳腺癌、宫颈癌及阴道出血等严重副作用^[4],使其应用受到很大限制。本研究测定绝经后妇女冠心病患者血清雌二醇(E_2)、总胆固醇(TC)、低密度脂蛋白胆固醇(LDL-C)等水平,观察补益肝肾法治疗对上述指标的影响。

1 临床资料

冠心病组:60例绝经后妇女CHD患者为1998年1月~2000年12月门诊及住院患者;年龄52~68岁,

平均 58.2 ± 2.2 岁;体重指数为 $25.8\pm3.2\text{kg/m}^2$,绝经年限均超过5年,平均 5.1 ± 0.5 年。

西医诊断标准参照WHO《缺血性心脏病的命名及诊断标准》。辨证分型标准:参照全国中医、中西医结合第3次老年医学研究协作组制定的标准^[5],分为肾气(阳)虚组、肾阴虚组及非肾虚组。

60例绝经后妇女CHD患者单盲随机分为中药组和西药组各30例。中药组年龄51.8~70.2岁,平均 57.6 ± 2.2 岁;体重指数为 $25.6\pm3.0\text{kg/m}^2$,绝经年限平均 5.3 ± 0.8 年;其中陈旧性心肌梗塞、有急性心肌梗塞史且超过半年者5例,典型心绞痛者12例,不典型心绞痛者10例,无心绞痛症状、但经运动平板检查确诊者3例。西药组年龄52.4~67.5岁,平均 57.6 ± 2.2 岁;体重指数为 $26.8\pm3.2\text{kg/m}^2$,绝经年限平均 5.2 ± 0.9 年;其中陈旧性心肌梗塞、有急性心肌梗塞史且超过半年者6例,典型心绞痛者12例,不典型心绞痛者11例,无心绞痛症状、但经运动平板检查确诊者1例。

健康组:30例绝经后妇女系正常健康体检者,平均年龄 57.3 ± 2 岁,体重指数为 $24.8\pm3.4\text{kg/m}^2$,绝经年龄平均为 5.2 ± 0.9 年。心功能均正常,并排除内分泌、肝、肾、乳腺、生殖系统疾患,无高血压、脑梗塞,近2个月无激素服用史,子宫颈刮片正常。

所有研究对象实验前1个月停用降血脂药及抗氧化剂,冠心病组与健康组在年龄、绝经年限、体重指数、血压、血脂等方面差异均无显著性。

2 治疗及观察方法

2.1 血脂测定:晨起空腹抽静脉血5ml,分离血清,试剂采用Randox Laboratories Ltd提供的免疫比浊法专用试剂盒,用美国产的贝克曼全自动生化分析仪检测血清TC、LDL-C。

2.2 E_2 测定:用美国Access全自动微粒子化学发光免疫仪测定,试剂采用美国产的贝克曼库尔特公司专用试剂盒,按药盒说明书操作。

2.3 服药方法:中药组用补益肝肾法。药物组成:熟地黄15g,茯苓12g,菟丝子12g,山茱萸12g,生白芍

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* 福建省泉州市中医院妇科、心内科,泉州市温陵南路215号(362000)

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15g,肉苁蓉 10g,黄芪 15g,丹参 15g,赤芍 12g。肾阴虚者加枸杞子 15g,熟地黄改为 18g;肾阳虚者加巴戟天 15g,淫羊藿 15g;水煎,3 日服 1 剂。西药组服尼尔雌醇(北京四环制药二厂,京卫药准字 1996 第 153001 号),每 15 天 1 次,每次服 2mg(因孕激素可减弱雌激素对冠脉的保护作用^[6],故本研究未使用孕激素)。两组均观察 6 个月,如心绞痛较剧加用消心痛 5~10mg 或含服速效救心丸 4 丸。

2.4 统计学方法:用 SPSS10.0 软件进行统计学处理,采用方差分析、相关分析及 *t* 检验等方法。

3 结果

3.1 雌激素水平变化:附表表示,治疗前冠心病组 E_2 水平低于健康组($P<0.01$)。西药组经尼尔雌醇治疗 3 个月后 E_2 水平逐渐上升,中药组 3 个月后 E_2 水平也逐渐上升,但低于西药组,差异有显著性($P<0.05$);西药组和中药组治疗 6 个月后 E_2 均显著上升,与各自治疗前比较,差异非常显著(P 均 <0.01);组间比较,两组差异无显著性($P>0.05$)。

3.2 血脂水平变化:中药组和西药组治疗 6 个月 LDL-C、TC 均明显下降($P<0.05$),组间比较,两组差异无显著性($P>0.05$),表明补益肝肾法干预治疗能降低绝经后妇女 CHD 患者 TC 和 LDL-C 水平。

3.3 血清雌激素与 TC 的相关性分析:补益肝肾法干预治疗 6 个月后,血清雌激素水平上升,而 TC 水平下降,两者呈显著负相关($r_1=-0.905, P<0.01$; $r_2=-0.908, P<0.01$)。

3.4 血清雌激素与 LDL-C 的相关性分析:补益肝肾法干预治疗 6 个月后,随着血清雌激素水平上升,而 LDL-C 水平下降,两者呈显著负相关($r_1=-0.909, P<0.01$; $r_2=-0.912, P<0.01$)。

3.5 血清雌激素与中医证型的关系:60 例冠心病患者辨证为肾虚(肾气虚、肾阳虚和肾阴虚)者 50 例,占 83.3%;非肾虚组占 16.7%;30 例健康组辨证为肾虚者 16 例,占 53.3%。组间比较,差异有显著性($P<0.05$)。冠心病组 E_2 平均水平为 $95.20\pm35.79\text{pmol/L}$,健康组 E_2 平均水平为 $169.39\pm39.89\text{pmol/L}$ 。组间比较,差异有显著性($P<0.01$)。

3.6 副作用:中药组 2 例偶发腹胀,不需停药。西药组有 2 例出现阴道出血,3 例乳房胀痛,均为一过性,未停药。

4 讨论

绝经后妇女采用雌激素替代治疗后 CHD 的发生率减少 50%,且对已患 CHD 患者的妇女益处更大^[4]。但其潜在的副作用限制了临床推广使用。本结果显示,

附表 两组治疗前后 E_2 、TC、LDL-C 变化比较($\bar{x}\pm s$)

组别	例数	时间	$E_2(\text{pmol/L})$	TC(mmol/L)	LDL-C(mmol/L)
中药组	30	治疗前	$94.28\pm35.26^{\Delta}$	$5.64\pm1.87^{\Delta}$	$3.12\pm0.62^{\Delta}$
		3 月	$139.82\pm37.85^{\Delta}$	4.56 ± 0.98	3.08 ± 0.68
		6 月	$201.48\pm41.23^{**}$	$4.12\pm1.32^*$	$2.68\pm0.74^*$
西药组	30	治疗前	$96.12\pm36.32^{\Delta}$	$5.84\pm1.90^{\Delta}$	$3.26\pm0.90^{\Delta}$
		3 月	164.25 ± 38.76	4.72 ± 1.06	3.22 ± 0.72
		6 月	$202.36\pm36.98^{**}$	$4.26\pm1.24^*$	$2.51\pm0.79^*$
健康组	30		169.39 ± 39.89	4.35 ± 1.12	2.30 ± 0.65

与本组治疗前比较, * $P<0.05$, ** $P<0.01$;与西药组同时间比较, $\Delta P<0.05$;与健康组比较, $\Delta P<0.01$

绝经后妇女 CHD 患者血清 E_2 水平显著低于健康组,提示雌激素水平过低是绝经后妇女易患 CHD 的原因之一;经过 6 个月补益肝肾法治疗后血清雌激素水平明显上升,与用尼尔雌醇治疗的上升水平基本一致。说明绝经后妇女 CHD 用补益肝肾法治疗是有益的,患者易于接受,便于推广。

研究表明,绝经后妇女血脂谱的异常改变与 E_2 缺乏有关,因而绝经后妇女 E_2 水平的严重降低可能是导致血脂代谢的异常及 CHD 发病率及死亡率增高的主要危险因素之一^[5]。本研究显示,用补益肝肾法治疗能够降低绝经后妇女 CHD 患者 TC、LDL-C 水平,TC 和 LDL-C 水平与血清 E_2 水平呈显著负相关,提示性激素对血脂代谢起着调节作用。低密度脂蛋白在动脉粥样硬化形成中起重要作用^[7],氧化不仅损伤内皮细胞,还参与抑制血管内皮依赖性舒张功能^[8]。

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ABSTRACTS FROM ORIGINAL ARTICLES

Clinical study on treatment of 30 cases of systemic lupus erythematosus with Hong Ban Decoction

Su Xiao, Hong Qiang, Xia Jing, et al.

30 cases of systemic lupus erythematosus (SLE) were treated with Hong Ban Decoction and other 30 cases were mainly treated with prednisone as controls. Hong Ban Decoction in eliminating proteinuria, improving blood picture and serositis, and reducing complications was superior to the control group, suggesting that Hong Ban Decoction has such pharmacologic actions as anti-vasculitis, regulating abnormal immunological function and decreasing inflammatory exudate. The total effective rate for a half year was 93.33% in the treatment group and 86.67% in the control group with no significant difference between the two groups ($P > 0.05$). Three years later, the total effective rate (87.5%) in the treatment group was superior to that (58.62%) in the control group ($P < 0.05$). It is suggested that the therapeutic effect of Hong Ban Decoction is better than prednisone in the long-term effect.

Authors' address: Laboratory of Rheumatic Diseases, Shanghai Municipal Hospital of TCM, Shanghai 200071

Key words: Erythematosus, systemic/TCM therapy, @Hong Ban Decoction

(Original article on page 359)

Study on correlativity of blood physical and chemical properties with TCM syndrome types in the patient of coronary heart disease with blood stasis syndrome

Qiu Ruixiang, Luo Zhiqiang, Zhu Yayi, et al.

Objective: To probe into essence of syndrome types of blood stasis syndrome. **Methods:** High shearing whole blood viscosity (η_{HB}), low shearing whole blood viscosity (η_{LB}), plasma viscosity (η_P), aggregation index of erythrocyte (AI), hematocrit (HCT) and levels of serum total cholesterol (CH), triglyceride (TG), plasma fibrinogen (Fb), prostacyclin (PGI_2), thromboxane (TXA_2) were determined in 216 cases of coronary heart disease with blood stasis syndrome. **Results:** η_{LB} and AI increased and PGI_2/TXA_2 ratio decreased significantly in the group of stagnation of Qi and stasis of blood, showing high aggregation state of blood; CH, HCT, Fb, AI and η_{LB} increased significantly in the group of blood stasis due to Yin-deficiency, showing high concentration, high agglutination and high aggregation state of blood; η_{LB} , η_P and TG increased significantly in the group of stagnation of phlegm and blood, showing high viscosity state of blood; only η_{HB} had some increase in the group of Qi-deficiency and blood stasis. **Conclusion:** Different syndrome types of blood stasis syndrome

have different biochemical material base, and changes of blood physical and chemical properties are closely related with TCM syndrome types, which provides an experimental basis for treatment of subtypes of blood stasis syndrome.

Authors' address: The First Affiliated Hospital of Zhongshan Medical University, Guangzhou 510080

Key words: Coronary artery diseases/blood, blood stasis/blood, types of syndrome

(Original article on page 378)

Effects of tonifying the liver and kidney method on levels of sexual hormones and metabolism of blood lipids in the patient of postmenopausal coronary heart disease

Wang Xiubao, Zhang Jiqing, Wang Wenchuan, et al

Objective: To approach to correlativity of levels of sexual hormones with coronary heart disease (CHD) of postmenopausal women and metabolism of blood lipids, and effects of tonifying the liver and kidney method. **Methods:** 60 postmenopausal women with CHD were randomly divided into Chinese drug group and western drug group, 30 cases each group. They were respectively treated with tonifying the liver and kidney method and Nylestriol for 6 months, and 30 health subjects were used as control group, and their blood estradiol (E_2), total cholesterol (TC) and low density lipoprotein-cholesterol (LDL-C) levels were determined before treatment and 3, 6 months after treatment. **Results:** (1) E_2 level in the CHD group was significantly lower than that of the control group ($P < 0.01$); (2) E_2 level increased gradually ($P < 0.01$), and LDL-C and TC levels decreased significantly ($P < 0.05$) after treatment for 6 months in the Chinese drug group, with no significant difference as compared with the western drug group ($P > 0.05$); (3) E_2 level increased and TC level decreased after treatment for 6 months in the Chinese drug group, the both showed a significantly negative correlation ($r_1 = -0.905$, $P < 0.01$); E_2 and LDL levels also showed significantly negative correlation ($r_1 = -0.909$, $P < 0.01$; $r_2 = -0.912$, $P < 0.01$). **Conclusion:** Attack of postmenopausal female CHD is related with decrease of female hormone levels. Tonifying the liver and kidney therapy is good for protecting the heart and blood vessels, and it is one of effective methods for prevention and treatment of postmenopausal female CHD.

Authors' address: Quanzhou City Hospital of TCM, Fujian Province 362000

Key words: Coronary artery diseases/TCM therapy, tonifying the liver and kidney, sexual hormones/metabolism

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