

证的研究

冠心病中医辨证与内皮素及降钙素基因相关肽关系的临床研究

陈建鸿^{*} 杜建^{*}

摘要 对100例不同证型冠心病患者血浆内皮素(ET)、降钙素基因相关肽(CGRP)两种相拮抗的血管收缩舒张活性肽进行临床检测,结果与对照组(30例正常人)比较,冠心病偏实组及偏虚组ET增高($P < 0.01$ 和 $P < 0.05$),且偏实组较偏虚组增高更为显著($P < 0.01$);但CGRP水平较正常人无显著性差异($P > 0.05$)。冠心病中医证型中,偏实组各型间,心血瘀阻较痰浊壅塞ET水平显著增高($P < 0.01$),与阴寒凝滞无显著性差异($P > 0.05$),且痰浊壅塞较阴寒凝滞亦无显著性差异($P > 0.05$);CGRP各型间无显著性差异($P > 0.05$)。偏虚组各型间,ET和CGRP水平差异均无显著性($P > 0.05$)。

主题词 冠状动脉疾病/中医药疗法 内皮缩血管肽类/血液 降钙素基因相关肽/血液

内皮素(Endothelin, ET)是血管内皮细胞分泌,迄今所知最强的缩血管活性多肽^[1]。血管内皮受损,ET分泌增多,冠状动脉舒缩平衡的调节遭到破坏,引起冠状动脉持续痉挛。降钙素基因相关肽(Calcitonin gene-related peptide, CGRP)是体内最强的舒血管活性肽,主要由支配心血管系统的传入神经末梢所释放。CGRP对ET的生物效应能产生拮抗作用,实验证明,CGRP不影响血浆ET的基础含量及基础释放,但能抑制病理条件下ET的大量释放^[2]。本研究旨在通过对冠心病不同中医证型血浆ET、CGRP水平变化的临床研究,揭示ET、CGRP在冠心病患者中的变化规律。

1 临床资料

1.1 诊断标准:冠心病的诊断参考1979年国际心脏病学会和协会及世界卫生组织临床命名标准化专题组的报告《缺血性心脏病的命名及诊断标准》。冠心病的

中医辨证标准参照卫生部1993年颁布《中药新药治疗胸痹的临床研究指导原则》。

1.2 病例来源:100例冠心病患者来自于福建省心血管病研究所、福建中医学院附属第二人民医院和福建省老年病院1996年2月~1997年6月的住院患者。其中男65例,女35例,平均年龄 66.9 ± 8.7 岁(40~80岁)。按诊断标准,其中稳定型心绞痛(SA)49例,不稳定型心绞痛(UA)41例,急性心肌梗塞(AMI)10例。按中医辨证,冠心病偏实组48例,其中心血瘀阻证25例,痰浊壅塞证20例,阴寒凝滞证3例;冠心病偏虚组52例,其中心肾阴虚证14例,气阴两虚证21例,阳气虚衰证17例。另设正常对照组30例,其中男17例,女13例,平均年龄为 64.5 ± 6.2 岁(48~72岁)。经齐同检验,冠心病组与正常对照组在性别、年龄分布及男女比例上具有可比性(P 均 > 0.05)。

纳入病例标准:临床确诊的冠心病者,进行中医辨证,证型较单纯者为首选对象,两型并见,但有一主型者为次选对象。排除病例标准:(1)兼见肝、肾、肺、内分泌等其它脏器系统严重病变或心脏本身其它严重病变者;(2)中医辨证两型并见无主次之分或三型并见证型复杂者;(3)不愿意配合检测者。正常人组无冠心病史,又经详细体检及胸透、心电图、彩色多普勒、血常规、血糖、肝肾功能等理化检查,排除心、脑、肝、肾、肺和内分泌等实质性病变。

2 检测方法

内皮素放射免疫药盒及降钙素基因相关肽放射免疫药盒均购自中国人民解放军总医院东亚免疫技术研究所,保存于 -70°C 低温冰箱内。本测定均采用非平衡均相竞争放射免疫分析法^[3]。患者于入院次日清晨采血,操作步骤按说明书进行,在XH6010Y自动计数器(西安262厂)上测定沉淀cpm数、标准曲线及结果由微机自动打印。

统计学方法采用两组之间对照比较,方差齐用 t 检验,方差不齐用 t' 检验,组间两两比较用方差分析。

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3 结果

附表表示,与正常对照组比较,冠心病偏实组及偏虚组血浆 ET 水平均增高,且冠心病偏虚组与偏实组比较,偏实组增高更为显著;但冠心病偏虚、偏实组与正常对照组比较,偏虚组与偏实组比较,血浆 CGRP 水平差异无显著性。冠心病中医证型中,偏实组各型间,心血瘀阻较痰浊壅塞血浆 ET 水平显著增高,但与阴寒凝滞组差异无显著性,且痰浊壅塞较阴寒凝滞差异亦无显著性;血浆 CGRP 各型间差异无显著性。偏虚组各型间,血浆 ET 及 CGRP 水平差异均无显著性。

附表 各型 ET、CGRP 检测比较 (pg/ml, $\bar{X} \pm S$)

分 组	例数	ET	CGRP
对照组	30	51.52±16.68	92.71±45.61
偏实组	48	112.58±53.66**	91.34±40.14
偏虚组	52	67.57±25.38*△	85.42±37.27
心血瘀阻	25	136.59±61.53**	85.64±37.94
痰浊壅塞	20	88.33±24.61**	104.13±41.38
阴寒凝滞	3	74.23±34.52	53.60±11.80
心肾阴虚	14	65.12±20.59*	81.65±38.93
气阴两虚	21	65.82±24.11*	86.78±36.31
阳气虚衰	17	71.75±30.91*	86.85±39.15

与正常对照组比较, * $P < 0.05$, ** $P < 0.01$

与冠心病偏实组比较, △ $P < 0.01$

与心血瘀阻组比较, () $P < 0.01$

4 讨论

本研究结果表明,与正常对照组比较,冠心病偏实组和偏虚组,缩血管作用的 ET 水平均显著增高,且偏实组增高更明显。在中医证型中,偏虚组血浆 ET 水平均较对照组增高,但组间比较无显著差异;偏实组中心血瘀阻和痰浊壅塞中血浆 ET 水平均较对照组增高,且心血瘀阻较痰浊壅塞增高更显著,阴寒凝滞虽较心血瘀阻降低,但较正常对照组增高,但差异无显著性,这可能与例数太少有关。从临床观察,冠心病偏实组与偏虚组均有血瘀的证候,但偏实组血瘀证候又较偏虚组为明显,而偏实组中心血瘀阻血瘀证候最为突出。所以在检测 ET 均呈与正常对照组增高现象,可见 ET 与冠心病血瘀证有密切的关系。

有学者研究冠心病中医分型与冠脉造影的关系,表明血瘀证与冠脉狭窄、痉挛关系最为密切^[4]。而 ET 具有收缩血管,促使冠脉狭窄、痉挛作用,所以 ET 与血瘀证可能有密切的关系。另有学者应用具有活血作用的当归能有效地降低冠心病患者血浆 ET^[6],进一步

证实血瘀证与 ET 可能有密切联系。实验证实:活血化瘀药物能增加血流量和降低血管阻力,即对血管壁有直接扩张作用^[6]。因此,本研究认为:ET 与冠心病血瘀证密切相关。

我们认为,血浆 ET 的测定,能为冠心病中医分型提供客观指标:ET 增高可做为冠心病夹瘀证的依据;ET 明显增高可做为冠心病偏实各证型的重要依据;而异常增高的 ET 可做为心血瘀阻证的测定指标。而与正常组比较,偏虚组血浆 ET 亦增高,但各组间无差异性,所以还不能依据 ET 来确定偏虚组的各证型,但可确定冠心病偏虚组有夹瘀证。以上说明,临床应用活血化瘀药能有效地防治冠心病的发生和发展。

与正常对照组比较,舒血管作用的 CGRP,冠心病偏虚组、偏实组均未见差异性,且偏虚组与偏实组之间,虚实组各型间,亦未见差异性。结果表明:CGRP 并不存在冠心病中医证型的特异性。我们认为,CGRP 是体内最强的舒血管活性多肽,对心血管系统产生舒张血管、心肌的正性肌力和变时作用的生物学效应,但在夹有血瘀证时可能是“瘀血”作用使之出现 CGRP 的内源保护作用受到牵制,才会出现上述情况,其原因目前尚不清楚,有待进一步探索。

5 参考文献

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ABSTRACTS OF ORIGINAL ARTICLES

Effect of Bushen (Kidney — tonification) Huayu (Stasis — elimination) on Indices of Marrow Cytology in Aplastic Anemia

Wang Shuqing, Liu Jie, Li Jianhua et al.

The enzyme contents, including cytochrome oxidase (CCO) succinic dehydrogenase (SDH), neutrophilic alkaline phosphatase (NAP), in intracellular marrow cells of 68 cases of computer graphic analysis before and after treatment were compared and analyzed with a controlled group. Results showed that the contents of CCO and SDH were markedly lower, and NAP markedly higher than the controlled group before treatment with significant difference ($P < 0.01$), and they were changed to nearly the level as the control after treatment ($P > 0.05$).

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Key words: Anemia, aplastic/enzymology Bushen quyu

(Original article on page 88)

Tubal Pregnancy Treated by Combined Use of Chinese Stasis Removing Materia Medica with Injection of MTX Through Vaginal — Fallopian Tube Under Fluoroscopy

Lian Fang, Zhao Bin, Li Jifeng et al.

Exploraton was made on the treatment of tubal pregnancy by injecting MTX under the fluoroscope, associated with Danshen injection, and the long — term and short — term effect and its indications observed. Result revealed that 8 cases out of the 10 treated were successfully cured. For short — term effect, 8 cases had vaginal bleeding for 9.7 days in average, the time for recovery of ovulation was 19.71 days. Twenty two days after treatment, β — hCG dropped to normal, with a mass < 1.6 cm in diameter in the fallopian tube under β — ultrasonic exam. For long — term effect, 5 out of 8 cases didn't adopt contraceptive measures, 4 of them had normal pregnancy. Of them, 2 had full — term delivery. The intelligence, development and health condition of the newborns were all normal.

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Key words: pregnancy, tubal/integrated medicine therapy drugs of activating blood and removing stasis/therapeutic application

(Original article on page 103)

Clinical Study on Relation Between TCM Differential Diagnosis of Zheng and Endothelin and Calcitonin Gene Related Peptides

Chen Jianhong, Du Jian

Clinical exams were made on two antagonistic active peptides, plasma ET and CGRP in 100 cases of CHD of different types of zheng were examined, with 30 cases of normal person as control. In predominant asthenic and predominant sthenic types of CHD, ET was increased ($P < 0.01$ and $P < 0.05$), with the latter group higher than the former one ($P < 0.01$), but the level of CGRP made no difference with that of the normal control group ($P < 0.05$). In different types of CHD in the sthenic group: the ET level was markedly increased in the type of stasis — blocking of heart — blood than that in the blockade of turbid phlegm type ($P < 0.01$), but made no difference with the type of blockade of stagnant Yin — cold type ($P > 0.05$). There was no difference of ET between the 2 types of blockade of Yin — cold blockade of turbid phlegm ($P > 0.05$). Regarding CGRP, there were no differences among all groups ($P > 0.05$). For the asthenic group the levels of ET and CGRP were not markedly different ($P > 0.05$).

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Key words: Coronary arterial disease/TCM therapy endothelin peptides/blood calcitonin gene — related peptide/blood

(Original article on page 108)

Study on Experimental Artherosclerosis in Rabbit Treated with Xuemaishu

Huang Heqing

TCM holds that the mechanism of artherosclerosis Xuemaishu effectively lowered the serum cholesterol, low density lipoprotein cholesterol and lipoprotein carrier B₁₀₀, increased the contents of superoxidized dismutase lowered the lipo — peroxidase, regulated the thrombin and prostacycline, decreased the size of arthero plaque in arterial intima, thickness of intima, and abnormal histological changes.

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Key words: arthero — scherosis/TCM therapy @ Xuemaishu

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