

缺血性脑血管病的中医辨证、心功能和血液流变学三者的关系

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内容提要 本文应用心肌收缩力、心室顺应性等血流动力学和全血比粘度、血球压积、血浆比粘度、红细胞电泳和纤维蛋白原等血液流变学指标,对 85 例缺血性脑血管病进行辨证分型的研究,结果发现:心肌收缩功能减弱者以气阴两虚型最多,为 75%;阳虚型 45.2%;阴虚型 30.7%。血液流变学的五项指标,除反映本病具有不同程度的血瘀的共性外,尚发现不同的中医辨证类型的差异。进一步研究有益于阐明机理和提高疗效。

脑血管病的中西医结合治疗中,常涉及中医辨证分型,目前,对中医辨证的现代科学研究,国内报道较多,但应用心功能和血液流变学为指标的尚不多见。本文探讨血流动力学和血液流变学与阳虚、阴虚和气阴两虚之间的关系。

对象与方法

一、研究对象:确诊为缺血性脑血管病(ICVD)患者 85 例,病程 3 个月~18 年,男性 49 例,年龄 44~65 岁,平均 59 岁;女性 36 例,年龄 42~72 岁,平均 59.4 岁。按 1978 年《新医学》关于脑血管病的分类和临床诊断标准⁽¹⁾,完全型中风脑梗塞恢复期者 28 例,进展型中风脑梗塞恢复期者 19 例,短暂性脑缺血(TIA) 26 例。脑动脉硬化具有神经衰弱症 9 例,痴呆症 3 例,持续高血压 55 例,冠心病 43 例。中医辨证除有不同程度的血瘀临床表现外,按全国虚证会议辨证参考标准⁽²⁾及电子计算机辅助中医虚证鉴别诊断⁽³⁾,属阳虚者 31 例,阴虚者 26 例,气阴两虚者 28 例。

二、检测指标及方法

1. 患者停药 3~7 天,血流动力学和血液流

变学指标分别于两个上午测定,同时辨证分型。

2. 血流动力学指标,应用多导生理记录仪⁽⁴⁾,计算心室射血前期(PEP),心室射血时间(LVET)间距以及 PEP/LVET 作为心肌收缩力,a 波持续时间或 a/DF 比值作为心脏顺应性。

3. 血液流变学的全血比粘度、血浆比粘度、血球压积、红细胞在自身血浆中电泳时间和纤维蛋白原等五项指标,按已报道文献进行测定⁽⁵⁾。

结 果

一、ICVD 患者心功能与中医虚证类型关系:见表 1。

表 1 虚证类型与心功能关系

	例数	心肌收缩力差		心室顺应性差	
		例数	%	例数	%
阳 虚	31	14	45.2	9	29
阴 虚	26	8	30.7	10	38
气阴两虚	28	21	75.0	13	46

表 1 可见心肌收缩力减弱者,以气阴两虚最多(75%),阳虚次之,阴虚最少,三者差别经 X^2 检验($X^2=13.91$, $P<0.001$),提示不同虚证的心肌收缩力不同。表 1 可见心室顺应性差

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者，也以气阴两虚的为多，但无统计学意义。 指标的关系：见表2。

二、ICVD 患者的中医辨证与血液流变学

表2 辨证各组血液流变性与健康人比较 (M±SD)

	全血比粘度 (比)	血球压积 (%)	血浆比粘度 (比)	红细胞电泳 (Sec)	纤维蛋白原 (mg %)
健康人男 (1) (237) 女	4.25±0.41 3.65±0.32	43.4±4.10 37.4±3.00	1.65±0.09	16.5±0.85	357±51
阳虚男 (2) (27) 女	4.69±0.47** 4.47±0.93***	44.26±4.36 39.77±9.10	1.70±0.13*	18.27±1.89***	414±81.12**
气阴两虚男 (3) (24) 女	4.34±0.42 3.89±0.47*	44.60±6.20 35.56±9.60	1.65±0.24	17.86±1.11***	421±108.16***
阴虚男 (4) (24) 女	4.41±0.63* 4.17±0.09**	42.73±4.36 39.0 ±3.80	1.80±0.17***	17.01±1.13	423.45±120.69***

注：与健康人比较：*P<0.05, **P<0.01, ***P<0.001,下同；() 为例数，下同；辨证各组间相比结果：全血比粘度(2)与(3)P<0.05；血浆比粘度(3)与(4)P<0.01,(2)与(4)P<0.05；红细胞电泳(2)与(4),(3)与(4)均P<0.01

表2可见三型虚证，与健康人相比全血比粘度和纤维蛋白原明显增高，血球压积为正常。其中阳虚组以全血比粘度为最高，并伴有红细胞电泳减慢为最突出；阴虚组以血浆比粘度增高为突出，并伴全血比粘度稍高；气阴两虚组以红细胞电泳时间略有延长，多数血液流变学指标介于另两型之间。提示血液流变学上的异常变化及瘀证的存在是缺血性脑血管病虚证的共性，三种虚证类型也显示差异。

三、心肌收缩力与血液流变性关系：见表

表3 心肌收缩力与血液流变性关系 (M±SD)

	全血比粘度 (比)	血球压积 (%)	血浆比粘度 (比)	红细胞电泳 (Sec)	纤维蛋白原 (mg %)
心肌收缩力减弱(43)	男 4.8±0.37*** 女 4.06±0.51	44.10±5.36 37.77±3.90	1.73±0.11**	17.8±1.07***	429±106***
健康人组(52)	男 4.38±0.55 女 4.23±0.76	43.04±5.38 40.21±4.8	1.71±0.14**	16.8±1.38	411±106**

表3可见心肌收缩力减弱组和健康人组相比，前者的血液流变学指标有四项异常，而后者仅两项异常，这提示本组ICVD患者血液流变性是有一定程度异常的，无论心功能有无异常，其纤维蛋白原和血浆比粘度与健康人相比均显著增高。但心肌收缩功能减弱组更为异常，此外还表现于红细胞电泳和全血比粘度的明显异常。

讨 论

应用血流动力学和血液流变学指标，对ICVD的中医辨证研究的结果表明，中医辨证分型是有其生物学因素可以追寻的。本文三种

类型的虚证，有其共同特征，表现为均有一定程度的心肌收缩力下降，全血比粘度和血中纤维蛋白原含量的增加。三种虚证也相互存在着区别，表现在阳虚者以红细胞电泳减慢为其主要特征；而阴虚者则以血浆粘度的增高最为突

出,而气阴两虚则以心肌收缩力的下降最为突出,我们认为在脑血管病的防治中,以上指标变化对于指导中医辨证分型以及按不同类型进行中西医结合的治疗,是一些较好的客观指标,为进一步提高ICVD的治疗效果和探讨ICVD发病机理具有一定的意义。

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中药治疗脑干残瘤 1 例报告

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脑干肿瘤好发于儿童和青少年,由于该瘤所处的解剖部位特殊,手术后易于复发,至今治疗尚无良策,今用自拟方“抗脑瘤饮”治疗脑干残瘤 1 例获得显效,报告如下。

患者熊×,男性,19岁,1982年2月因头痛、呕吐、行走不稳向左倾倒数月之久,往某院住院查治。当时有左向水平眼球震颤,伸舌左偏,左侧指鼻试验不准,郎勃氏征阳性;眼底检查:左鼻侧较模糊;脑血管造影检查为幕下占位性病变。手术所见为延脑瘤,行肿瘤大部分切除术,病理报告为星形细胞瘤Ⅰ~Ⅱ级。术后可站立和缓走,住院治疗一个月后出院。不久又出现头痛、呕吐等症,并日见加重,卧床不起,出院一个月后赴上海某院就诊,眼底检查:双鼻侧稍模糊,症状表现与术前相差无几。治拟残瘤恶化用环己亚硝脲(CCNU)化疗,因患者头痛呕吐剧烈而拒绝,遂于5月6日来我处就诊。重病容,痛苦貌,步履蹒跚,头痛、呕吐,时有晕厥,痛时汗出以头为甚,头颈不能转动,易于跌倒,颅后术区膨隆、胀痛、口角流涎,纳差。检查:体征同术前,仍见左手轻瘫,脉细,伸舌左偏,苔白厚。用“抗脑瘤饮”:白花蛇舌草60g 半枝莲30g 野葡萄藤30g 沙氏鹿茸草15g 蚤休15g 僵蚕10g 地龙10g 蝉蜕10g 海藻15g 夏枯草15g 牡蛎15g(先下)。随症加减,每日一剂二次分服。首方加法夏10g 白术10g 陈皮6g 云苓15g。服药

14剂后,上述诸症有所改善,舌苔由厚转薄,守上方加车前子10g,服药21剂后,已不呕吐,头痛减轻。守方照服,35剂后,症状日见减轻,仅有时视觉模糊感,生活基本自理。上方去车前子加丹参10g,服药56剂后,诸症明显改善,仅有时头晕,易受惊,左手较迟钝。此后患者长期服药善后,同年9月1日恢复工作,迄今已5年之久,患者健康状况和劳动能力早已恢复病前水平,1985年2月15日复查眼底:视神经乳头境界清楚,无水肿及萎缩现象,黄斑区清楚;脑电图正常;脑血流图正常;头颅X光摄片查:除因手术遗留的枕后下部骨窗外,余无异常。1986年10月颅脑CT查:见延脑及桥脑后缘欠清晰,正常解剖结构略紊乱。印象:后颅凹呈术后改变,未见明确复发灶。

体会:“抗脑瘤饮”由抑瘤消肿、软坚散结、熄风解痉诸药为伍,临床用于脑瘤患者颇为有效。然因脑瘤所发之症不一,故宜根据病情辨证治之,患者初诊时苦于恶心、呕吐、纳差等脾虚痰湿,运化不健之症,且舌苔白厚,示湿浊不化,故于方中加用法夏、白术、陈皮、云苓、车前子等,以健脾益气,利湿化痰。待症状改善,继以活血化瘀之剂如丹参、川芎,以促抗瘤和改善微循环,同时较长期间加用调补气血药物如黄芪、党参、参叶,以提高机体免疫功能和抗病能力,达扶正祛邪,攻补兼施之效,并长期服药以善后效。

书 讯 由卫生部副部长、国家中医管理局局长胡熙明任名誉主编,中国中医研究院广安门医院组织编写的《中国历代名医学术经验荟萃丛书》之一——《衷中参西的张锡纯》和《医药并精的李时珍》,已由北京燕山出版社出版。这两本新书,除全国各地新华书店发行外,北京中国中医研究院广安门医院办公室尚有部分存书,读者可直接联系函购。

(陈士奎)

Abstracts of Original Articles

Observation on Curative Effects of Using Chinese Traditional Anesthesia on Severe Thromboangitis Obliterans

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The curative effects of using Chinese traditional anesthesia on severe thromboangitis obliterans (TAO) patients proved that this method has a much better painrelief effect than dolantin; it enables the patients to abstain from anesthetic addiction; elevate the skin temperature of the suffered limbs; increase the walking distance; improve the blood flow and accelerate the wound healing, etc.

The analysis on 30 cases of severe, stage III patients, who have injected 205 times Chinese traditional anesthesia, and indicated that the marked effective rate was 66.7 %, effective rate 20 %, total effective rate 86.7 %. The results were superior to any other non-operative therapies, especially the marked effective rate of traditional anesthesia, which was significantly higher than that of other therapies. The period of treatment was shortened to more than 50% and the amputation rate lowered obviously. No serious side effects appeared and no obvious impairment could be seen in important organs by using this method. Therefore it was proved to be a safe and effective therapy.

The therapeutic mechanism of Chinese traditional anesthesia was discussed in this article. This drug can eliminate the extravasated blood, suppress immunity and regulate central and autonomous nerves.

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Relationship among Syndrome Differentiation of TCM, Cardiac Function and Hemorheology in Ischemic Cerebral Vascular Diseases

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Parameters of both hemodynamics such as myocardial contractility and ventricular flexibility, and hemorheology such as whole blood viscosity, hematocrit, plasma viscosity, RBC electrophoretic time and fibrinogen were measured in 85 patients of ischemic cerebral vascular diseases. They were divided into 3 groups, namely, Yang deficiency (阳虚) group, Yin deficiency (阴虚) group and Qi-Yin deficiency (气阴虚) group according to the syndrome differentiation of TCM. The results of hemodynamics showed that patients with decrease of myocardial contractility belonged chiefly to the Qi-Yin deficiency group (75 %), next to it was the Yang deficiency group (45 %) and the least was the Yin deficiency group (31 %). The results of hemorheology showed that in the above-mentioned three groups there existed the same changes such as the whole blood viscosity and fibrinogen being much higher than that of normal persons, but the Yang deficiency group revealed that it had the highest whole blood viscosity and the slowest RBC electrophoresis, and the Yin deficiency group had the highest plasma viscosity, and the Qi-Yin deficiency group showed that its hemorheological parameter had the intermediate value between the other groups. According to the relationship between hemodynamics and hemorheology, it was concluded that those abnormal in myocardial contractility were even more abnormal in hemorheological tests.

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Relationship between Levels of β Thromboglobulin, Platelet Factor IV and Coronary Heart Disease with Blood Stasis Syndrome in TCM

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The levels of β thromboglobulin (β TG) and platelet factor IV (PF₄) of 46 coronary heart disease (CHD) patients were measured. The results showed that the levels of β TG and PF₄ were much higher than those of the normal control (32.20 ± 22.75 ng/ml vs 20.4 ± 17.2 ng/ml and 14.25 ± 13.34 ng/ml vs 4.34 ± 3.03 ng/ml respectively, $P < 0.001$). It was also revealed that the levels of β TG and PF₄ were evidently elevated in 9 acute myocardial infarction (AMI) patients than in 37 old myocardial infarction (OMI) and/or anginal patients (49.94 ± 29.62 ng/ml vs 25.87 ± 15.26 ng/ml and 21.5 ± 18.80 ng/ml vs 10.59 ± 8.38 ng/ml respectively, $P < 0.05$). It needs to be pointed out that in 46 CHD patients, 27 of them were differentiated as blood stasis (BS) syndrome in TCM, and their levels of β TG and PF₄ were