

临床报道

补肾化瘀法对再生障碍性贫血骨髓
细胞酶学指标的影响王树庆¹ 刘捷¹ 李建华¹ 张圣明¹ 胡匡祜² 李子孝²

摘要 采用计算机图像分析技术,检测了 68 例再生障碍性贫血(再障)患者治疗前后的骨髓细胞内细胞色素氧化酶(CCO)、琥珀酸脱氢酶(SDH)、中性粒细胞碱性磷酸酶(NAP)含量,并与正常对照作了比较分析。发现治疗前 CCO、SDH 含量明显减低, NAP 含量明显增高,与对照组比较有显著性差异($P < 0.01$)。经补肾化瘀法治疗后,其含量分别接近对照组($P > 0.05$)。

主题词 贫血,再生障碍性/酶学 补肾 祛瘀

近年来,对再生障碍性贫血(简称再障)“肾精亏虚、髓海瘀阻”的发病机理和“补肾化瘀”疗法的研究日趋活跃。我们自 1987 年以来开展了补肾化瘀治疗再障的临床研究,并用新型计算机图像分析技术,分别检测了 68 例再障治疗前后骨髓细胞内细胞色素氧化酶(CCO)、琥珀酸脱氢酶(SDH)、中性粒细胞碱性磷酸酶(NAP)含量,以观察补肾化瘀法对再障酶学指标的影响,旨在阐明新的发病机理和治疗原理,为本疗法治疗再障提供更加客观的理论依据。

1 一般资料

1.1 诊断标准:西医诊断标准符合《血液病诊断及疗效标准》^[1];中医诊断参照再障中医辨证分型标准^[2],分为肾阴虚、肾阳虚及肾阴阳两虚 3 型。伴有面色晦滞,肌肤甲错,皮肤瘀点或瘀斑,月经量少色暗有瘀块或经闭不行,舌质紫暗有瘀斑,脉沉细或细涩等血瘀主症,2 项以上可诊断为肾虚血瘀型。

1.2 研究对象:治疗组 68 例再障均为我院

1987 年~1996 年间住院患者,且多数为西药和其它疗法治疗无显效或缓解后复发者。男性 37 例,女性 31 例;年龄 5~57 岁,平均年龄 24 岁;病程 20 天~136 个月,平均 10 个月。其中原发性 30 例,继发性 38 例(服用氯霉素 5 例,感冒通 10 例,复方新诺明 9 例,安乃近 4 例,去痛片 5 例,接触苯 3 例,农药 2 例)。入院时血红蛋白 15~93g/L,平均 51g/L。血白细胞($0.9 \sim 3.4$) $\times 10^9$ /L,平均 2.2×10^9 /L。血小板($10 \sim 91$) $\times 10^9$ /L,平均 42×10^9 /L。网织红细胞 0.1~1.2%,平均 0.7%。骨髓三系造血细胞明显减少,非造血细胞增多,其中骨髓有核细胞增生重度减低者 34 例,增生减低者 30 例,增生活跃者 4 例。中医辨证分型:肾阴虚挟瘀者 23 例,肾阳虚挟瘀者 36 例,肾阴阳两虚挟瘀者 9 例。

对照组 61 例,为健康的患者家属或志愿者,其中男性 52 例,女性 9 例;年龄 20~56 岁,平均年龄 34 岁。

2 治疗及观察方法

2.1 治疗方法:以自拟补肾化瘀汤为基本方:熟地、丹参、鸡血藤各 30g,山萸肉、枸杞子、菟丝子、补骨脂、旱莲草各 20g,红花、桃仁、当归、川芎、牛膝各 10g。水煎 2 次,取汁 400ml,每日 1 剂,分早晚 2 次服,每周服 5 剂,3 个月为 1 个疗程。随症加减:肾阴虚挟瘀者加青蒿、龟板、阿胶、丹皮等;肾阳虚挟瘀者加鹿角胶、肉桂、巴戟天等;有出血倾向者加三七粉、水牛角粉、白茅根、地榆炭等;发热者加金银花、连翘、板蓝根、羚羊角粉、柴胡等。贫血重者(血红蛋白 < 50 g/L)输注浓缩红细胞;血小板过低($< 15 \times 10^9$ /L)并伴明显出血者,输注浓缩血小板;合并感

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染者配合抗生素治疗。对照组不服用任何药物。

2.2 检测方法:

2.2.1 样品制备:68 例再障患者分别在入院时和病情缓解或痊愈后,常规从髂骨穿刺点抽取骨髓液约 0.3ml,涂于载玻片有标记端,同时取正常对照骨髓涂于同一载玻片无标记端,待室温干燥后按文献介绍的方法^[3]进行 CCO、SDH、NAP 常规染色。

2.2.2 测试:应用 MPV-TASPLUS 显微分光图像分析仪(德国 Leitz 公司生产,波长 450~465nm,放大 16×40 倍),每份样品随机测试病人及正常对照骨髓染色阳性细胞 35~40 个,计算机自动打印出所测细胞内 CCO、SDH、NAP 相对含量(为任意单位 AU)。

2.2.3 统计学方法:采用方差分析。

3 结果与分析

3.1 治疗结果:疗效标准参照《血液病诊断及疗效标准》^[1]。68 例再障患者经治疗 1 个疗程以上评定疗效。结果:基本治愈 13 例(19.1%),缓解 22 例(32.4%);明显进步 24 例(35.3%),无效 9 例(13.2%),总有效率 85.8%。治愈 13 例中,平均治疗时间为 79 天,随访至 1997 年 5 月未复发。无效 9 例中,有 4 例为急性再障,死于严重感染和内脏出血,2 例为用环孢菌素 A 及单克隆抗体治疗缓解后复发者,2 例转化为阵发性睡眠性血红蛋白尿,1 例转化为骨髓增生异常综合征。全部病例未发现治疗相关性不良反应,无一例出现肝、肾功能损害。

附表 再障治疗前后三项指标含量(AU)比较($\bar{X} \pm S$)

分组	例数	CCO	SDH	NAP
对照组	61	84.57±20.18	17.29±4.42	31.18±5.12
治疗组				
疗前	68	53.42±12.47*	12.06±1.98*	51.51±11.88*
疗后	68	83.53±11.30**△	16.42±3.45**△	30.47±8.17**△

注:与对照组比较 * $P < 0.01$, ** $P > 0.05$;

治疗前后自身比较△ $P < 0.01$

3.2 测试结果:附表示,治疗前 CCO、SDH 含量明显低于正常对照组($P < 0.01$),而 NAP 含量却异常高于对照组($P < 0.01$)。治疗后 CCO、

SDH、NAP 含量分别接近对照组水平($P > 0.05$)。

4 讨论

我们通过对本病系统的研究亦发现,人体内生物氧化酶代谢紊乱与再障发病密切相关^[4]。有学者报道再障患者骨髓细胞线粒体膜酶合成障碍,并进一步从分子学水平证实有明显的细胞 DNA 损伤^[5]。这与我们以往报道再障患者骨髓细胞 DNA 和 AgNORs 含量明显低下的结果相吻合^[6]。本研究测试结果亦证实,再障患者 CCO、SDH 含量明显低于对照组, NAP 含量异常高于对照组。NAP 升高的机理可能与再障高尔基体异常发达,致 NAP 合成加速,贮存、转运增多而瘀积有关^[7]。中医认为,再障属“虚劳”、“血劳”等病范畴,其病机为肾精亏虚,髓海瘀阻。

本研究发现,肾虚血瘀可导致骨髓细胞内 CCO、SDH、NAP 等一系列酶学指标紊乱,经补肾化瘀治疗后,各项指标均趋于正常。表明了肾虚血瘀的客观存在,也为临床应用补肾化瘀法治疗再障提供了较为合理的实验依据。现代药理研究证实,补肾化瘀药物可调整机体的免疫功能,改善骨髓微环境。临床观察亦发现,补肾化瘀治疗本病较单纯补肾和活血化瘀或益气健脾疗效为优^[8]。

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 Cyto — enzymology in Aplastic Anemia

Wang Shuqing, Liu Jie, Li Jianhua et al.

The enzyme contents, including cytochromatic 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.

Exploration 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 atherosclerosis 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 — sclerosis/TCM therapy @ Xuemaishu

(Original article on page 113)