

除湿祛痰法治疗慢性肾功能不全临床与实验研究

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摘要 肾衰胶囊治疗慢性肾功能不全 74 例, 近期观察该药可提高超氧化物歧化酶(SOD)水平, 与对照组 34 例比较差异显著, 对降低尿素氮、肌酐、升高血红蛋白、降低丙二醛(MDA)无显著差异。远期疗效比较组间差异非常显著, 治疗组生活质量明显高于对照组。实验研究表明肾衰胶囊在降低尿素氮和肌酐的同时可升高大鼠 SOD, 与对照组比较差异显著。

主题词 肾功能衰竭, 慢性/中医药疗法 祛湿 祛痰

根据临床观察, 痰湿不仅是慢性肾衰病变过程中的一种产物, 又是导致疾病发展和加剧的因素, 为此笔者研制了具有除湿祛痰, 平调阴阳作用的肾衰胶囊, 治疗慢性肾功能不全(CRF)74 例, 与对照组 34 例比较, 远期疗效非常明显, 现将结果报告如下。

1 临床研究

1.1 一般资料: 本组 108 例均为住院患者, 男 60 例, 女 48 例; 年龄自 26~67 岁, 平均年龄 34.16 岁; 原发病: 慢性肾炎 77 例, 肾盂肾炎 16 例, 糖尿病肾炎 6 例, 肾动脉硬化 5 例, 遗传性肾炎 2 例, 大动脉炎 2 例。

1.2 诊断标准: 根据美国心肾学会建议, 慢性肾功能不全可分为四期。即 I 期(肾功能代偿期): 肌酐清除率(Ccr)50~70%, 血尿素氮(BUN)正常或暂时升高, 尿比重正常。II 期(肾功能不全期): Ccr 25~50%, BUN 正常或轻度升高, 可出现夜尿、浓缩稀释能力减退显著。III 期(肾功能衰竭早期(氮质血症期、尿毒症早期)): Ccr 10~25%, BUN 在 80mg% 以下, 少尿等渗尿, 酸中毒电解质紊乱。IV 期(肾功能衰竭终末期(尿毒症晚期)): Ccr 小于 10%, BUN 80~100mg%, 少尿、等渗尿明显, 酸中毒电解质

紊乱。

1.3 分组按住院顺序号凡能被 3 整除者列入丹参组(以下简称对照组), 其余为肾衰胶囊组(以下简称治疗组)。对照组入选 34 例, 其中 II 期 5 例, III 期 20 例, IV 期 9 例; 治疗组 74 例, 其中 II 期 21 例, III 期 45 例, IV 期 8 例, 两组病情比较无明显差异($P>0.05$)。

1.4 治疗方法: 对酸中毒、高血压、并发尿路感染等症状, 两组处理方法完全一致, 当尿素氮 $>80\text{mg}\%$, 血肌酐(Scr) $>7\text{mg}\%$, 两组均加灌肠方(生大黄 15g, 煅牡蛎 30g, 炒白芍 15g)煎成 150ml 灌肠, 每日 1 次, 连用 7 天, 停 1 周。以后根据 BUN、Scr 水平, 隔日或每日灌肠 1 次。

对照组: 丹参注射液 20ml 加入 10% 葡萄糖 300ml 中, 静脉点滴, 每日 1 次, 10 天为 1 疗程, 间歇 10 天, 开始第 2、3 疗程, 一般治疗 2~3 个月。

治疗组: 肾衰胶囊(由北京中成药制剂中心生产, 每粒含生药 3.12g)3~4 粒, 1 日 3 次。该方由陈皮、半夏、大黄、丹参、人参等组成。

1.5 观察方法: 两组均于治疗前查两次, 治疗后查 3 次血红蛋白(Hb)、BUN、Scr 取其平均值, 疗前疗后各查 1 次超氧化物歧化酶(SOD)、丙二醛(MDA), 并进行随访观察, 最长随访 5 年。

1.6 疗效标准: 根据 1987 年全国肾衰保守疗法专题学术会议和新药临床研究指导原则拟定的标准进行评定。显效: 症状减轻或消失; Ccr 增加大于或等于 30%; Scr 降低大于或等于 30%; 以上(1)项必备, (2)、(3)具备 1 项即可。有效: 症状减轻或消失; Ccr 增加大于或等于 20%; Scr 降低大于或等于 20%; 治疗前后 Scr 的对数或倒数, 直线回归方程分析, 其斜线率有显著意义。其中(1)项必备, 其它具备 1 项即可。无效: 不符合显效和有效条件者。

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1.7 结果:

1.7.1 近期疗效:对照组 34 中显效 7 例,有效 19 例,无效 12 例,有效率 76.47%;治疗组 74 例中显效 27 例,有效 41 例,无效 6 例,有效率 91.89%。两组比较有非常显著性差异($P<0.01$)。

1.7.2 近期各项指标的变化:从表 1 可以看出经治疗后两组 BUN、Scr 和纤维蛋白原(Fg)均明显下降,治疗前后差异显著($P<0.05$),但组间比较无明显差异($P>0.05$)。治疗组治疗后 Hb、SOD 明显升高,组间比较有显著性差异($P<0.05$)。

表 1 治疗前后两组指标变化

指标	对照组(34 例)		治疗组(74 例)	
	治疗前	治疗后	治疗前	治疗后
BUN	70.86±68.67	47.40±36.23*	69.63±59.62	48.38±47.63*
Scr	7.16±2.14	5.24±2.32*	7.20±3.10	5.10±1.38*
Hb	7.20±3.76	7.80±4.12	7.45±2.89	8.10±2.32△
SOD	59.63±31.10	54.18±42.51	57.98±29.76	98.65±31.15*△
MDA	8.12±3.12	8.89±4.65	7.98±4.13	3.41±2.54
Fg	540.48±238.976	443.36±136.23*	567.51±24.74	430.41±141.42*

* 与治疗前比较 $P<0.05$, △与对照组比较 $P<0.05$

1.7.3 随访结果:对出院后的患者我们进行了 1~5 年的随访,结果:对照组 BUN 波动在 30~70mg%, Scr 波动在 3~7mg%, 生活能自立者 6 例,进入维持性血透维持生命 15 例,死亡 13 例。治疗组 BUN 波动在 30~70mg%, Scr 波动在 3~7mg%, 生活能自立者 43 例,靠血透维持生命 21 例,死亡 10 例,两组比较有非常显著性差异($P<0.01$)。

2 实验研究

实验动物:选用雄性 Wister 大白鼠,体重 $100\text{g}\pm 20\text{g}$ 。

模型制作与分组:对喂养 1 周后的大白鼠

行 5/6 肾切除,诱发慢性肾衰模型,对成活的 32 只白鼠于术后第 8 周,由眼眶静脉丛取血送检,选取血肌酐在 2~4mg% 的大白鼠共 16 只,随机分为 3 组, I 组(丹参治疗组)6 只, II 组(肾衰胶囊组)6 只, III 组(空白对照组)4 只。

实验药物:丹参注射液由江苏常熟制药厂生产,肾衰胶囊由北京中成药制剂中心生产,两组均于术后第 8 周末开始喂药,每天 1 次,空白对照组喂饲清水,共给药 3 周,于术后第 11 周末取血送检。

结果:观察血 BUN、Scr、Fg、SOD、MDA 等指标。

表 2 给药前后各项指标的变化

指示	I 组		I 组		II 组	
	8 周	11 周	8 周	11 周	8 周	11 周
BUN	37.60±23.15	28.60±31.12*	48.17±28.16	28.31±27.32*	35.24±21.68	32.50±27.34
Scr	3.20±1.89	1.30±2.10*	3.30±2.13	0.90±1.23*	3.21±2.35	3.02±1.89
SOD	72.34±70.98	67.82±29.14	69.36±79.89	146.42±79.38△	70.60±69.65	56.70±70.25
MDA	7.76±7.12	6.52±5.34	7.14±6.12	4.26±3.79	6.29±4.32	7.24±8.10
Fg	386.36±49.89	320±68.20*	384.00±78.00	359.00±58.00*	385.31±82.40	365.00±83.86

* 与 III 组比较 $P<0.05$, △与 I 组比较 $P<0.05$

表 2 示,丹参注射液(I 组)和肾衰胶囊(II 组)均可使 BUN、Scr、Fg 下降,给药前后差异显著,与空白对照组比较差异显著($P<0.05$)。肾衰胶囊组大鼠服药 3 周后 SOD 明显升高($P<0.05$),MDA 有所下降,而丹参组变化不大,

SOD 略有降低,MDA 下降不明显。

3 讨论

通过临床和实验观察表明,丹参注射液和肾衰胶囊均有降低血 BUN、Scr 和 Fg 的作用,不同的是治疗组具有提高患者和白鼠 SOD 活

ABSTRACTS OF ORIGINAL ARTICLES

Observation on Effect of Chronic Bronchitis and Asthma Treated by Principle of " Winter Diseases Treated in Summer": Report of 600 Cases.

Zhang Xuefeng

600 cases of chronic bronchitis and asthma were treated during the period of 3—fu (dog—days) period by acupuncturing back acupoints or applying paste of white mustard seed to the points. The results were: 43 cases cured, 264 cases ameliorated, 93 ineffective, the total effective rate being 80.5%. Best results were seen in asthma of the type of lung bound by wind and cold, its effective rate being 90%; effect for the same type in chronic bronchitis and damp—phlegm type was the next, with a total effective rates of 85.71% and 88.19% respectively.

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Key Words: Bronchitis/TCM therapy asthma/TCM therapy @ winter diseases treated in summer

(Original article on page 730)

Clinical and Experimental Studies on Chronic Renal Insufficiency Treated by Method of Removing Dampness and Expelling Phlegm.

Wang Hongzhong, Zhang Jinjun, Chen Zhigang, Li Huilan

Seventy—four cases were treated with Shenshuai (Renal insufficiency) capsule. Short—term results showed that it increased the level of SOD, the difference being significant when compared with that in the control group of 34 cases; whereas there was no difference between the 2 groups in terms of lowering of urea nitrogen, creatinine and MDA and of increase of blood hemoglobin. For long—term result, the difference was very significant. The living quality of the treatment group was obviously superior to the control group. Experiments also showed that the capsule, as compared with the control group, markedly lowered the creatinine and urea nitrogen and increased SOD in rats.

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Key Words: Renal insufficiency, chronic/TCM therapy removing dampness—expelling phlegm

(Original article on page 732)

Study on Thrombocytic Ultrastructure and Functions

of Blood Stasis Syndrome in Liver Disorders.

Zhang Chizhi, Zhang Jianjun

The results of this study revealed that there was less discoid cell and more pseudopodium, more thrombocytes tended to agglutinate with increased proportion of hyper—glycogenic platelets. There were also platelets sticking to RBC, WBC and lymphocytes. The granules within the platelets were decreased or even fused together, unable to differentiate them. The vascular system were dilated and proliferated. Abnormal granules were seen with its size similar to a—granules, covered with membrane, with cytoplasm and metabolites inside. Under the revulsion of ADP, there was 70.28% agglutinating body. Most intercellular spaces revealed unclear bridge—form connection or even disappeared with fusion of cellular membrane. All these changes were more distinctive than that in the control group, demonstrating the changes in ultrastructure and agglutination function might be one of the causes of blood stasis in hepatopathy.

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Key Words: Hepatic disorders/pathology blood stasis/pathology platelet/ultrastructure

(Original article on page 740)

Observation on Action of Zheng Xuan Yin on Improvement of Blood Circulation of Cerebral Ischemia in Rats with ¹²³I—IMP Tracer.

Wang Jingyi, Maata Yasihiluo, Hatuoi Nauoya, Cui Xili, et al

4VO rat models were used. The remedy Zhenxuan Yin, composed of Rhizoma Gastrodia, Poria, Radix Lugustici Chuanxiong, divided into 3 dosages, were infused 30 minutes after total cerebral infarction. The cerebral blood flow was marked with ¹²³I—IMP 24 hours later. Results showed Zhenxuan Yin in dosages of 0.03g/kg, 0.3g/kg, 1g/kg, 3g/kg all markedly increased cerebral blood flow in which the dose 0.3g/kg can restore the blood flow to a normal level.

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Key Words: cerebral ischemia/TCM therapy @ zhenxuan Yin @ ¹²³I—IMP

(Original article on page 742)