

临床报道

补肾益精对老年脑功能的临床研究

王学美* 谢竹藩*

摘要 本研究以五子衍宗液为补肾益精的代表方,服药6周后,瞬时记忆及逻辑故事分节记忆有所提高,单脚闭目直立的时间延长,手颤及肾虚衰程度亦减轻,记忆广度(顺背、倒背数字)治疗前后无显著差异。

主题词 补肾 五子补肾丸/治疗应用 衰老/药物作用

中医认为,肾主骨生髓,与人体生长发育衰老密切相关。老年人肾气亏虚,脑髓不足,故有记忆力减退等脑功能变化。五子衍宗丸为补肾益精的常用有效方剂。本研究选用了按该方制成的五子衍宗液,观察其对老年人脑功能及肾虚衰老症状的影响。

1 临床资料

观察对象为60~80岁无明显心、肺、肝、肾及内分泌疾患的男性患者,结合中医虚证辨证标准选出肾虚者73例。随机分为两组:一组为补肾益精组(简称治疗组)53例,平均年龄 65.8 ± 4.5 岁;另一组为对照组20例,平均年龄 66.5 ± 4.7 岁。两组年龄无显著性差异。

2 辨证标准及治疗方法

肾虚证辨证诊断主要依据为腰脊酸痛(外伤性除外)、胫酸膝软或足跟痛、耳鸣或耳聋、发脱或齿摇、健忘、尿后有余沥或失禁、性功能减退。具上述症状三项以上者,诊为肾虚。治疗组采用补肾益精法,服用五子衍宗液(按药典中五子衍宗丸的配方改制而成,每支相当于生药6g,由北京中药五厂提供),每日2支,口服,早晚各1次,疗程6周。对照组不予任何治疗,仅进行前后两次脑功能的测试。

3 观察指标及方法

观察两组治疗前后肾虚衰老症状及脑功能的变化。

3.1 肾虚衰老症状积分方法:肾虚衰老症状显著,持续出现为重度,积3分;肾虚衰老症状时轻时重,间断出现为中度,积2分;肾虚衰老症状轻微或偶尔出现为轻度,积1分;无明显衰老症状出现为0分。

3.2 脑功能测定方法:包括下列5项指标。

手振颤:用干电池组装成手振颤检查盒,盒上的铜板共有两排孔,8个大孔(直径为3mm)和8个小孔(直径为2mm)。被测者手持铜针向孔内插入,插入而不碰孔壁者,盒上指示灯不亮,即得分;碰铜板或孔壁者则灯亮,即不得分。每插准1个大孔得0.5分,插准1个小孔得1分。1分钟内插完,每孔只限插1次。左右两手全满分为24分。

瞬时记忆:取40张图形卡片(建筑、花鸟、人物、风景等),随机选出20张,逐张给受试者观看(每张1秒钟),看毕与其余20张混合,将所有40张卡片再逐张取出给受试者观看(每张观看不超过10秒钟),让其将已看过的图片挑出。记分=(对张数-错张数)/总张数。

记忆广度:包括顺背(3~11位数)和倒背(2~8位数)数字。顺次以每秒钟2位数的速度连续录音,让受试者听后复述。每个分值的数字均包括3组。3组复述全对者记1分,错1组扣1/3分,错2组即停止。

逻辑故事识记:用录音机录下有情节的2个简单故事,每个约100字左右,均分为4个中心大意和19个分节。按照随机原则,先让受试者治疗前听取一个故事的录音,听完后立即复述,并将复述内容用录音机录下。治疗后用同样

* 北京医科大学中西医结合研究所,北京西城区西安门大街1号(100034)

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的方法让受试者听取另一个故事的录音并复述。每个中心意义和每个分节均记1分。中心大意满分4分,分节满分19分。

单脚闭目直立时间:临床检查时,受试者直立,抬一腿,使髋关节呈90度后闭目,记录时间从开始至不能站立为止,即为单脚闭目直立时间。

4 结果

4.1 治疗前后肾虚衰老症状的积分变化:治疗前肾虚衰老症状总积分,治疗组53例为 9.57 ± 4.11 分(均值±标准差,下同),对照组20例为 9.35 ± 3.98 分,两组积分颇为接近。治疗后治疗组53例的总积分为 6.64 ± 3.49 分,对照

组20例的总积分为 8.90 ± 4.00 分。与治疗前相比较,两组积分虽均下降,但治疗组治疗前后比较有显著性差异($P < 0.01$),而对照组则无明显差别($P > 0.05$)。临床观察到五子衍宗液有显著改善腰脊酸痛、尿后余沥的作用。

4.2 脑功能的变化:附表显示,治疗前两组的脑功能测定结果相近,具有可比性。治疗组经五子衍宗液治疗后,单脚闭目直立时间延长($P < 0.05$),手振颤试验、瞬时记忆能力及逻辑故事识记的分节分数治疗后均升高($P < 0.01$);与对照组同期比较亦均有显著性差异($P < 0.05$ 或 $P < 0.01$)。对照组各项指标的观察前后测试均无显著性差异。

附表 两组治疗前后脑功能测试指标的变化比较(M±SE)

例数	单脚闭目直立 时间(秒)	手 振 颤 (分)	瞬时记忆 (分)	记 忆 广 度		逻辑故事识记		
				顺背(分)	倒背(分)	中心(分)	分节(分)	
对照组								
疗前	20	5.45±0.55	10.45±0.84	0.28±0.06	5.31±0.15	1.69±0.08	2.65±0.20	9.05±0.85
疗后	20	5.66±0.82	10.78±0.87	0.31±0.06	5.43±0.16	1.63±0.08	2.50±0.22	9.30±0.90
治疗组								
疗前	53	6.25±0.66	10.84±0.57	0.29±0.03	5.39±0.11	1.75±0.07	2.68±0.11	9.81±0.53
疗后	53	8.76±0.91*△	14.57±0.53*▲	0.48±0.03*△	5.63±0.11	1.94±0.10	2.91±0.11	12.57±0.43*▲

*与对照组疗前比较 $P < 0.05$, $\star$ 与对照组疗前比较 $P < 0.01$, Δ 与对照组疗后比较 $P < 0.05$, $\blacktriangle$ 与对照组疗后比较 $P < 0.01$

5 讨论

祖国医学认为,老年人记忆力减退与随龄而至的肾虚衰老密切相关。由于老年人肾精虚损,精亏不得上充于脑,故记忆力减退。补肾则精盛髓足,髓足则智力强。五子衍宗液是古方五子衍宗丸的新剂型。方中重用枸杞子、菟丝子补肾益精为主药,且菟丝子味甘性平,不仅益阴,且能扶阳,温而不燥,补而不滞;枸杞子味甘性平,也为滋补肝肾之良药;覆盆子、五味子固肾涩精;车前子泄肾中虚火。诸药配合,具有补肾益精、扶阳固涩的作用。

现代医学研究表明,老年人液化智能随龄递减,是机体衰老的重要标志,主要表现为知觉整合能力、记忆力、思维敏捷度以及注意、反应速度等有关能力下降^[1]。文献报道,老年人逻辑故事识记、图象自由回忆、数字广度记忆和指向记忆等四项短时记忆成绩,均有因年老而显著

减退的趋势,其中顺背数字和逻辑故事中心记忆减退较慢。老年人的瞬时记忆能力也有随龄减退的显著性变化^[2]。手振颤程度及单脚闭目直立的时间也与年龄呈负相关^[3]。因此,我们采用了瞬时记忆能力、记忆广度、逻辑故事识记、手振颤程度及单脚闭目直立时间判断治疗前后老年人脑功能的变化。本研究结果表明,补肾益精的五子衍宗液可明显改善老年人瞬时记忆、逻辑故事分节记忆及肾虚衰老症状,并可改善老年人的平衡功能和减少老年人的手颤,提示以五子衍宗液补肾益精有延缓衰老、延缓老年人智力减退的作用。

6 参考文献

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ABSTRACTS OF ORIGINAL ARTICLES

Clinical Studies on Actions of Replenishing Kidney and Essence on Brain Function in the Elderly

Wang Xuemei Xie Zhufan

By using "Solution of Five Seeds for Reproduction" as the representative recipe administered for 6 weeks, it has been observed that there were improvements in instantaneous memory, segmental memory in logical stories, prolongation in the time of standing on a single foot with closed eyes amelioration in trembling of hands and degree of senility of deficient kidney. There was no significant difference between the results before and after the treatment.

Authors' Address: Institute of Integrated Chinese and Western Medicine, Beijing Medical University, 100034

Key Words: Replenishing Kidney Kidney Replenishing Pills of Five Seeds/therapeutic application senility/drug application

(Original article on page 347)

Toxicity of Large Dose of Cisplatin on Kidney Prevented by Decoction of Radix Astragali seu Hedysari and Poria

Chen Jianhua Zhang Suole Huang Zhaoming et. al.

Clinical observation revealed that combined use of Decoction of Radix Astragali seu Hedysari and Poria with large dose of Cisplatin, none of the cases showed abnormality in BUN, Cr. with improvement of biochemical indices, there was also diuretic actions observed. A hydration control group revealed worse result. The experiment proves that the Decoction is capable of preventing and ameliorating the harmful effect on kidney induced by Cisplatin in rats.

Authors' Address: Hospital of Oncology, Jiangxi Province, Nanchang, Jiangxi 330029

Key Words: Cisplatin/toxicity renal disease/chemical induction

(Original article on page 349)

Clinical and Experimental Studies on Biliary Stones in the Middle-aged and the Elderly Treated with Rongshiling

Wu Shengdong Wu Qiang Shao Pei et. al.

Average time of administering Rongshiling was 3.5 months and the total effective rate was 54.3%. It yielded rather satisfactory results in stones in biliary,

hepatic and common bile ducts. Lithogenic models of guinea pig showed the rate of lithogenesis in experimental group was 25%, while that of control group 70.6—86.9%. The remedy also elevated the T_3 level in serum, suggesting its probable relationship with the prevention of biliary stones.

Authors' Address: Second Clinical College, N. Bethune Medical University, Changchun, Jilin 130041

Key Words: biliary stone/TCM therapy @Rongshiling
(Original article on page 352)

Study on the Correlation Between Cold—Heat Warm—Cool Quality and Distribution of Inorganic Elements in Recipes

Li Enkuan Guan Jinghuan Jiang Baolin et. al.

By applying the methods of inter—element meter and mean line, decoction solution of 110 recipes were analysed for the characteristics of distribution of inorganic elements. In those recipes containing more warm—heat drugs, the contents of most elements were higher than the line of average value, while those with more cool—cold drugs, lower than the mean line, suggesting that the distribution value of inorganic elements may be a determining factor responsible for the cold—heat quality of a recipe.

Authors' Address: Institute of Intergration of Chinese and Western Medicine, Wuhan, Hubei 430022

Key Words: Recipe/Chemical microelement/analysis Nature and taste of Chinese materia medica

(Original article on page 362)

Experimental study on AIDS Treated with Glyke

Guan Chongfen

Experimental study was made on Glyke preparation which revealed certain effect in 66 cases of AIDS treated in Tanzania. It has been proved that this preparation not only regulates the immunity of the organism, but also possesses anti—viral action, so it is a safe and effective Chinese traditional remedy for treating AIDS.

Authors' Address: Department of Immunity, Institute of Basic Theory, China Academy of TCM

Key Words: Acquired Immuno Deficiency Syndrome/TCM therapy Radix Glycyrrhiza/therapeutic application

(Original article on page 365)