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自拟益气活血方治疗小儿脾肾气虚型肾病综合征的疗效观察

达春水¹ 高红¹ 张虹² 海瑞奇³ 乔文善⁴

(1 宝鸡市中医医院儿科 陕西 宝鸡 721001; 2 宝鸡市中医医院药剂科 陕西 宝鸡 721001;

3 眉县中医院儿科 陕西 眉县 722302; 4 岐山县医院儿科 陕西 岐山 721000)

摘要 目的:探讨自拟益气活血方治疗小儿脾肾气虚型肾病综合征的临床疗效。**方法:**选择2014年6月到2016年10月我院收治的80例脾肾气虚型肾病综合征患儿,按随机数字表法分为对照组和治疗组各40例。对照组给予强的松治疗,治疗组在对照组治疗的基础上给予自拟益气活血方治疗,两组均治疗4个月。评估两组临床疗效,检测治疗前后两组24h尿蛋白、总胆固醇(TC)、血浆白蛋白(Alb)以及肾功能指标包括尿素氮(BUN)、血肌酐(Scr)、血肌酐清除率(Ccr)。**结果:**治疗组的总有效率为95.00%,明显高于对照组的67.50%,差异具有统计学意义($P<0.05$)。治疗后,两组24h尿蛋白、TC、BUN及Scr水平低于治疗前,Alb、Ccr水平高于治疗前,且治疗组上述各指标水平变化均显著优于对照组,差异均具有统计学意义($P<0.05$)。**结论:**自拟益气活血方治疗小儿脾肾气虚型肾病综合征的临床疗效显著,能够明显改善患儿肾功能,值得在临床上推广应用。

关键词: 自拟益气活血方;脾肾气虚型肾病综合征;小儿;疗效

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Clinical Efficacy of Yiqi Huoxue Decoction in the Treatment of Children with Spleen and Kidney Deficiency Type Nephrotic Syndrome

DA Chun-shui¹, GAO Hong¹, ZHANG Hong², HAI Rui-q³, QIAO Wen-shan⁴

(1 Department of Pediatrics, Chinese Medicine Hospital of Baoji, Baoji, Shaanxi, 721001, China;

2 Department of Pharmacy, Chinese Medicine Hospital of Baoji, Baoji, Shaanxi, 721001, China;

3 Department of Pediatrics, Meixian Hospital of Traditional Chinese Medicine, Meixian, Shaanxi, 722302, China;

4 Department of Pediatrics, Qishan County Hospital, Qishan, Shaanxi, 721000, China)

ABSTRACT Objective: To study the clinical efficacy of Yiqi Huoxue Decoction in the treatment of children with spleen and kidney deficiency type nephrotic syndrome. **Methods:** A total of 80 children with spleen and kidney deficiency type nephrotic syndrome in our hospital from June 2014 to October 2016 were enrolled in this study. The subjects were divided into control group ($n=40$) and treatment group ($n=40$) according to the random number table method. The control group was treated with prednisone, and the treatment group was treated with prednisone combined with Yiqi Huoxue Decoction, the two groups were treated for 4 months. The clinical efficacy of the two groups were evaluate. The 24h proteinuria, total cholesterol (TC), plasma albumin (Alb), and renal function parameters including blood urea nitrogen (BUN), serum creatinine (Scr), and serum creatinine clearance (Ccr) of the two groups before and after treatment were compared. **Results:** The total effective rate of the treatment group was 95.00%, which was significantly higher than 67.50% of the control group, the difference was statistically significant ($P<0.05$). The 24h proteinuria, TC, BUN and Scr of the two groups after treatment were significantly lower than before treatment, the Alb, Ccr of the two groups were significantly higher than before treatment, and above indexes in treatment group were better than the control group, the differences were statistically significant ($P<0.05$). **Conclusion:** Yiqi Huoxue Decoction have good clinical efficacy in the treatment of children with spleen and kidney deficiency type nephrotic syndrome, which can obviously improve children renal function, and is worthy of clinical application.

Key words: Yiqi huoxue decoction; Spleen and kidney deficiency type nephrotic syndrome; Children; Efficacy

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前言

肾病综合征是一种儿科常见的泌尿系统疾病,是指患儿肾小球滤过膜对血浆蛋白的通透性增加,从而导致蛋白尿等多种病理改变的临床后期综合征,其临床特征为高蛋白尿、周身水

肿、低蛋白血症、高脂血症等^[1-3]。肾病综合征在我国泌尿科的发生率仅次于急性肾炎,并且其发病率近年来有逐年增高的趋势,严重威胁着患儿的身体健康^[4]。目前,临床治疗小儿肾病综合征主要采用激素、抗凝剂、免疫增强剂、免疫抑制剂等药物,具有明确的疗效,但均不能达到根治的目的^[5]。尤其是常规激素疗法在小儿肾病综合征中应用较广泛,但激素存在向心性肥胖、库欣综合征、骨质疏松、消化性溃疡、诱发或加重感染等多种不良反应,大剂量时甚至会造成患儿多语、失眠、兴奋、烦躁

作者简介:达春水(1974-),男,本科,副主任医师,从事小儿肾脏系统疾病方面的研究,E-mail: 151619151@qq.com

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不安、易激动、注意力分散等多种精神症状^[6,7]。因此,寻找安全有效的治疗措施用于小儿肾病综合征的治疗具有重要的临床意义。自拟益气活血方是一种由茯苓、黄芪、生薏苡仁、砂仁、杏仁、防风、生甘草、连翘及淡竹叶等多种中药成分煎制而成的汤剂,具有补肾益脾、活血化瘀、清热解毒之功效。本研究探讨自拟益气活血方治疗小儿脾肾气虚型肾病综合征的临床疗效,研究结果如下。

1 资料与方法

1.1 一般资料

选择2014年6月到2016年10月我院收治的80例脾肾气虚型肾病综合征患儿作为研究对象。病例纳入标准:^①符合《肾小球疾病的临床分类、诊断及治疗标准》中有关肾病综合征的诊断标准^[8]; ^②符合《中药新药临床研究指导原则》中有关脾肾气虚证的诊断标准^[9]; ^③年龄1-12岁。病例排除标准:^①伴有先天性肾病综合征、先天性肾畸形、糖尿病肾病等先天性疾病患儿;^②重症肝炎患者;^③心、肝、肾功能不全患儿;^④伴有严重血尿患儿。

所有纳入患儿均依照随机数字表法分为对照组和治疗组,每组40例。对照组患者男23例,女17例;年龄1-12岁,平均年龄(6.31±3.26)岁;病程1-13个月,平均病程(6.77±4.65)个月;疾病类型:肾炎性肾病综合征7例;单纯性肾病综合征24例;难治性肾病综合征9例。治疗组患者男22例,女18例;年龄1-11岁,平均年龄(5.84±4.03)岁;病程1-12个月,平均病程(5.93±5.61)个月;疾病类型:肾炎性肾病综合征8例;单纯性肾病综合征22例;难治性肾病综合征10例。比较两组患者上述临床资料均无统计学差异($P>0.05$),故两组间具有可比性。本研究所有纳入病例均于事先征得患者同意并签署知情同意书,另外本研究内容经本院医学伦理委员会批准放行。

1.2 治疗方法

两组患者均给予对症治疗,包括纠正水电解质紊乱、抗感

染、控制高血压等。对照组患者给予标准方案的激素治疗方案,具体为:强的松(购自浙江仙琚制药股份有限公司,规格5 mg/片,国药准字H33021207),起始剂量为1.5-2.0 mg/kg·d,3次/d,使用4-8 w后每次减量2.5-5.0 mg,直至停药。治疗组患者在对照组治疗的基础上给予自拟益气活血方治疗,自拟益气活血方包括:茯苓15 g、黄芪20 g、生薏苡仁25 g、砂仁3 g、杏仁3 g、防风10 g、生甘草3 g、连翘10 g、淡竹叶10 g,煎服,200 mL/剂,1剂/d,早晚两次温服,以上剂量适用于6岁患儿,随着年龄和体重的变化酌情进行加减处理。两组患者均连续治疗2个疗程,每个疗程2个月。

1.3 检测指标

1.3.1 临床疗效评价 依据《中药新药临床研究指导原则》^[9]和《小儿内科学》^[10]中关于肾病综合征的疗效评价标准,临床疗效分为:^①痊愈:临床症状完全缓解,实验室检查症状均恢复正常;^②显效:临床症状有明显改善,蛋白尿减少2个“+”以上;^③无效:所有临床症状均无改善情况,甚至症状有加重倾向。计算总有效率公式为:总有效率=(痊愈+显效)/总例数×100%。

1.3.2 检测指标 检测并比较两组患者治疗前及治疗后4个月的24 h尿蛋白、总胆固醇(TC)、血浆白蛋白(Alb)以及肾功能指标,包括尿素氮(BUN)、肌酐(Scr)、肌酐清除率(Ccr)。Alb的检测采用XS-800i Sysmex全自动血液分析仪,24 h尿蛋白、TC及肾功能的检测均采用日立7600型全自动生化分析仪。

1.4 数据处理

本研究所有数据均采用SPSS19.0软件包处理,其中计数资料以率(%)表示,采用 χ^2 检验,计量资料以均数±标准差($\bar{x} \pm s$)表示,采用t检验, $P<0.05$ 表示比较差异具有统计学意义。

2 结果

2.1 两组临床疗效对比

治疗组总有效率高于对照组($P<0.05$),见表1。

表1 两组临床疗效对比[n(%)]

Table 1 Comparison of the clinical efficacy in two groups [n(%)]

Groups	n	Cure	Excellent	Invalid	Total effective
Control group	40	18(45.00)	9(22.50)	13(32.50)	27(67.50)
Treatment group	40	24(60.00)	14(35.00)	2(5.00)	38(95.00)
χ^2 value					9.928
P value					0.002

2.2 两组治疗前后24h尿蛋白、TC、Alb水平比较

治疗前,两组患者24 h尿蛋白、TC、Alb水平比较差异无统计学意义($P>0.05$);治疗后,两组24 h尿蛋白、TC水平明显低于治疗前,Alb水平明显高于治疗前,并且治疗组24 h尿蛋白、TC、Alb水平变化均优于对照组,差异具有统计学意义($P<0.05$)。见表2。

2.3 两组治疗前后肾功能指标比较

治疗前,两组肾功能指标BUN、Scr及Ccr水平比较差异无统计学意义($P>0.05$);治疗后,两组BUN、Scr水平低于治疗

前,而Ccr水平高于治疗前,且治疗组各肾功能指标水平明显优于对照组($P<0.05$)。见表3。

3 讨论

目前,小儿肾病综合征的发病机制尚不明确,大多研究者认为与患儿免疫系统功能紊乱有关,免疫系统功能紊乱后引起肾小球滤过膜的电荷屏障和结构屏障功能下降,从而导致大量血浆蛋白进入尿液,引发一系列临床候群综合征^[11-13]。激素治疗是小儿肾病综合征的经典疗法,具有明确的疗效,然而不良反

表 2 两组治疗前后 24h 尿蛋白、TC、Alb 水平比较

Table 2 Comparison of the levels of 24 h proteinuria, TC and Alb in two groups before and after treatment

Groups	n	Time	24 h proteinuria(g)	TC (mmol/L)	Alb (g/L)
Control group	40	Before Treatment	6.39± 1.07	12.46± 4.31	17.27± 3.84
		After treatment	2.14± 0.36*	7.24± 2.60*	24.62± 5.53*
Treatment group	40	Before treatment	6.32± 1.15	12.25± 4.74	16.98± 4.12
		After treatment	0.84± 0.21**	3.97± 1.13**	39.85± 5.83**

Note: Compared with before treatment, *P<0.05; Compared with the control group, **P<0.05.

表 3 两组治疗前后肾功能指标比较

Table 3 Comparison of renal function indexes in two groups before and after treatment

Groups	n	Time	BUN (mmol/L)	Scr (μmol/L)	Ccr (mL/min)
Control group	40	Before treatment	9.13± 0.57	97.24± 8.30	47.11± 3.05
		After treatment	8.04± 0.31*	83.17± 6.44*	59.97± 3.78*
Treatment group	40	Before treatment	8.95± 0.60	98.82± 9.11	46.97± 3.21
		After treatment	6.21± 0.19**	64.37± 4.82**	68.34± 4.14**

Note: Compared with before treatment, *P<0.05; Compared with the control group, **P<0.05.

应较大且长期用药有高血压、高血脂、消化系统溃疡、骨质疏松症等不良反应发生的危险,甚至会影响患儿的生长发育^[14-16]。因此,选用安全有效的治疗措施用于小儿肾病综合征的治疗具有重要的临床意义。祖国传统医学认为,小儿肾病综合征属“虚劳、水肿”范畴,与脾、肺、肾三个脏器有密切关系,是由患脾、肺、肾功能紊乱,引发膀胱气化不利,三焦决渎失司,水液运行失常,泛滥肌肤所致,故治疗应以补肾益脾、活血化瘀、清热解毒为主^[7]。自拟益气活血方是一种由茯苓、黄芪、生薏苡仁、砂仁、杏仁、防风、生甘草、连翘及淡竹叶等多种中药成分煎制而成的汤剂,茯苓、黄芪具有健脾益气利水之功效,生薏苡仁、砂仁、杏仁具有清热利湿之功效,防风、生甘草、连翘及淡竹叶具有固表、清表热之功效,诸药合用共同发挥活血化瘀、健脾益气、除湿行水之功效^[18,19]。本研究探讨自拟益气活血方治疗小儿脾肾气虚型肾病综合征的临床疗效,以期为临床治疗小儿脾肾气虚型肾病综合征提供一定的思路。

本研究结果显示,治疗组患者的总有效率为 95.00%,明显高于对照组的 67.50%(P<0.05)。提示自拟益气活血方治疗小儿脾肾气虚型肾病综合征的临床疗效显著。这可能是由于自拟益气活血方中各种中药成分共同发挥活血化瘀、健脾益气、除湿行水的作用,另外联合经典的糖皮质激素治疗,共同发挥治疗小儿脾肾气虚型肾病综合征的作用,具有较好的疗效,这与汪蕾等人的报道结果相符^[20,21]。本研究所有纳入病例均于治疗后得到及时的追踪观察,且样本量充足,研究结果具有较好的说服力。另外本研究结果显示,治疗后,两组 24 h 尿蛋白、TC、BUN 及 Scr 水平显著低于治疗前,而 Alb、Ccr 水平高于治疗前,且治疗组 24 h 尿蛋白、TC、BUN、Scr、Alb 及 Ccr 水平变化均优于对照组(P<0.05)。提示自拟益气活血方能够降低脾肾气虚型肾病综合征患儿蛋白尿、提升血浆白蛋白含量,还能够改善患儿肾功能。蛋白尿是肾病综合征最主要的特征,而应用激素治疗能够加重患儿机体抵抗力下降,这也正是中医所讲的

“气虚”^[22]。现代药理学研究表明^[23-25],黄芪、茯苓具有升高血浆白蛋白、降低血甘油三酯、TC 水平的作用,生薏苡仁、砂仁、杏仁具有清热解毒作用,从而清除患儿体内免疫复合物,有利于免疫功能的恢复,从而改善患儿肾功能。

综上所述,自拟益气活血方治疗小儿脾肾气虚型肾病综合征的临床疗效显著,能够明显改善患儿肾功能,值得在临床上推广应用。

参考文献(References)

- [1] Skrzypczyk P, Przychodzień J, Pań czyk-Tomaszewska M. Benign acute childhood myositis complicating influenza B infection in a boy with idiopathic nephrotic syndrome[J]. Cent Eur J Immunol, 2016, 41 (3): 328-331
- [2] Kuźma-Mroczkowska E, Skrzypczyk P, Pań czyk-Tomaszewska M. Levamisole therapy in children with frequently relapsing and steroid-dependent nephrotic syndrome:a single-center experience [J]. Cent Eur J Immunol, 2016, 41(3): 243-247
- [3] Ohara S, Kawasaki Y, Maeda R, et al. Serum myeloid-related protein 8/14 in minimal change-and glomerulonephritis-related nephrotic syndrome[J]. Pediatr Int, 2016, 58(10): 998-1002
- [4] Zhang H, Wang Z, Dong LQ, et al. Children with Steroid-resistant Nephrotic Syndrome:Long-term Outcomes of Sequential Steroid Therapy[J]. Biomed Environ Sci, 2016, 29(9): 650-655
- [5] Nakagawa T, Shiratori A, Kawaba Y, et al. Efficacy of rituximab therapy against intractable steroid-resistant nephrotic syndrome [J]. Pediatr Int, 2016, 58(10): 1003-1008
- [6] 杨春颖.浅谈中西医结合治疗小儿肾病综合征的疗效[J].中西医结合心血管病杂志, 2014, 2(17): 65-66
Yang Chun-ying. Efficacy of traditional Chinese combined with western medicine for the treatment of nephrotic syndrome children[J]. Cardiovascular Disease Journal of integrated traditional Chinese and Western Medicine, 2014, 2(17): 65-66

- [7] Chen Y, Wan JX, Jiang DW, et al. Efficacy of calcitriol in treating glucocorticoid-induced osteoporosis in patients with nephrotic syndrome: an open-label, randomized controlled study [J]. Clin Nephrol, 2015, 84(11): 262-269
- [8] Nie L. Clinical experience in TCM treatment of refractory nephrotic syndrome[J]. J Tradit Chin Med, 2008, 28(1): 46-48
- [9] 梁茂新,范颖.证候类中药新药研制亟待解决的若干理论问题[J].中医药信息, 2015, 32(5): 124-126
Liang Mao-xin, Fan Ying. Some Urgent Theoretical Problems about Developing New TCM Drugs Used for Syndromes[J]. Information on Traditional Chinese Medicine, 2015, 32(5): 124-126
- [10] Peng T, Li H, Hu Z, et al. Psychological status of patients with nephrotic syndrome undergoing percutaneous renal biopsy [J]. J Chin Med Assoc, 2015, 78 (11): 657-661
- [11] 李星慧,赵婧,唐菁华,等.原发性肾病综合征小儿发生院内感染的危险因素分析及护理研究 [J]. 现代生物医学进展, 2016, 16(9): 1698-1700
Li Xing-hui, Zhao Jing, Tang Jing-hua, et al. Analysis of Risk Factors and Nursing Measures of Pediatric Primary Nephrotic Syndrome with Nosocomial Infection [J]. Progress in Modern Biomedicine, 2016, 16 (9): 1698-1700
- [12] Jellouli M, Fitouhi S, Abidi K, et al. Mycophenolate mofetil in treatment of childhood steroid-dependent nephrotic syndrome [J]. Tunis Med, 2016, 94(3): 221-225
- [13] Yoshizawa C, Kobayashi Y, Ikeuchi Y, et al. Congenital nephrotic syndrome with a novel NPHS1 mutation[J]. Pediatr Int, 2016, 58(11): 1211-1215
- [14] Groves AP, Reich P, Sigdel B, et al. Pneumococcal hemolytic uremic syndrome and steroid resistant nephrotic syndrome[J]. Clin Kidney J, 2016, 9(4): 572-575
- [15] Tasic V, Gucev Z, Polenakovic M. Steroid Resistant Nephrotic Syndrome-Genetic Consideration[J]. Pril(Makedon Akad Nauk Umet Odd Med Nauki), 2015, 36(3): 5-12
- [16] Tkaczyk M, Miklaszewska M, Lukamowicz J, et al. Blood concentration of amino thiols in children with relapse of nephrotic syndrome[J]. World J Pediatr, 2016, 12(3): 353-359
- [17] Lemley KV, Faul C, Schramm K, et al. The Effect of a Gluten-Free Diet in Children With Difficult-to-Manage Nephrotic Syndrome [J]. Pediatrics, 2016, 138(1): e20154528
- [18] Arif MK, Arif M, Amjad N. A histopathological outlook on nephrotic syndrome: A pediatric perspective [J]. Indian J Nephrol, 2016, 26(3): 188-191
- [19] 兰娜.中医护理在肾病综合征患者中的应用[J].中国实用护理杂志, 2011, 27(35): 13-14
Lan Na. Application of traditional Chinese medicine nursing in patients with nephrotic syndrome [J]. Chinese Journal of Practical Nursing, 2011, 27(35): 13-14
- [20] 汪蕾,蔡朕.自拟益气三仁汤治疗小儿肾病综合征临床观察[J].中国临床医生, 2013, 41(4): 64-65
Wang Lei, Cai Zhen. Clinical observation of Yiqi Sanren Decoction in treatment of children with nephrotic syndrome [J]. Chinese Journal for Clinicians, 2013, 41(4): 64-65
- [21] Cuzzoni E, De Iudicibus S, Franca R, et al. Glucocorticoid pharmacogenetics in pediatric idiopathic nephrotic syndrome [J]. Pharmacogenomics, 2015, 16(14): 1631-1648
- [22] 陈以平,邓跃毅,倪兆慧,等.中医方案治疗特发性膜性肾病肾病综合征的前瞻性、随机、对照、多中心临床研究[J].中国中西医结合肾病杂志, 2012, 13(6): 471-474
Chen Yi-ping, Deng Yue-yi, Ni Zao-hui, et al. Prospective, randomized, controlled, multicenter clinical trial of traditional Chinese medicine in the treatment of idiopathic membranous nephropathy [J]. Chinese Journal of Integrated Traditional and Western Nephrology, 2012, 13(6): 471-474
- [23] 吴锦美,吴国星.中西医结合治疗肾病综合征严重水肿蛋白尿临床观察[J].中国中医急症, 2015, 24(5): 927-929
Wu Jin-mei, Wu Guo-xing. Clinical observation on the treatment of severe edema proteinuria in nephrotic syndrome with integrated traditional Chinese and Western Medicine [J]. Journal of Emergency in Traditional Chinese Medicine, 2015, 24(5): 927-929
- [24] 边东,吕哲,石蒙,等.自拟益气化痰通络方对原发性肾病综合征激素维持治疗阶段患者凝血功能及血脂的影响 [J]. 疑难病杂志, 2014, 13(7): 694-696
Bian Dong, Lv Zhe, Shi Meng, et al. Effects of Yiqihuayutongluo decoction on blood coagulation and blood lipid in patients with primary nephrotic syndrome in hormone maintenance stage [J]. Chinese Journal of Difficult and Complicated Cases, 2014, 13 (7): 694-696
- [25] 刘建民,薛闪,张灵芝,等.滋阴益气中药减少儿童肾病综合征复发疗效观察[J].临床和实验医学杂志, 2015, 14(8): 630-633
Liu Jian-min, Xue Shan, Zhang Ling-zhi, et al. Observation on therapeutic effect of traditional Chinese medicine with Nourishing Yin and Tonifying Qi to reduce the relapse of nephrotic syndrome in pediatric patients [J]. Journal of Clinical and Experimental Medicine, 2015, 14(8): 630-633