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口服补液盐治疗儿童急性腹泻轻中度脱水的疗效研究 *

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摘要 目的:观察口服补液盐治疗儿童急性腹泻轻中度脱水的临床疗效。**方法:**选取我院儿科收治的63例急性腹泻伴轻中度脱水症状患儿,采取随机数表法分为两组,其中对照组32例患儿予标准口服补液盐,而治疗组31例患儿予补液盐溶液。对比治疗前后两组患儿血浆内Na^+、K^+、Cl^-离子水平,临床症状恢复时间及改善情况。**结果:**治疗后,两组患儿的电解质水平均有所改善,治疗组患儿Na^+、K^+及Cl^-水平均优于对照组,差异有统计学意义($P<0.05$);治疗组患儿口渴、头晕、乏力及腹痛症状的恢复时间均较对照组明显缩短,差异有统计学意义($P<0.05$)。治疗组临床总有效率明显优于对照组,差异具有统计学意义($P<0.05$)。**结论:**口服补液盐能明显改善儿童急性腹泻而致的轻中度脱水症状,减少静脉输液对患儿造成的负面影响,值得在临床上进行推广。

关键词:儿童急性腹泻;轻中度脱水;口服补液盐溶液;临床观察

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Efficacy of Rehydration Salts for Children with Acute Diarrhea in Different Dehydration*

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ABSTRACT Objective: To observe the clinical efficacy of oral rehydration salts for children with acute diarrhea from mild to moderate dehydration. **Methods:** 63 cases of children with acute diarrhea from mild to moderate dehydration were selected and randomly divided into two groups. 32 cases in the control group were treated with standard oral rehydration salts (international standard formula), while 31 cases in the treatment group were treated with the rehydration salts solution. The plasma Na^+, K^+ and Cl^- levels and clinical efficacy were observed and compared before and after the treatment between the two groups. **Results:** After treatment, the electrolyte levels were improved in both groups, and the Na^+, K^+ and Cl^- in the treatment group were significantly higher than those of the control group with statistically significant differences ($P<0.05$); the total effective rate of the treatment group was 96.77%, which was significantly higher than that of the control group (84.38%, $P<0.05$). **Conclusions:** Oral rehydration salts could significantly improve the symptoms of dehydration for children with acute diarrhea from mild to moderate and had clinical significance of promotion.

Key words: Acute diarrhea; Mild to moderate dehydration; Oral rehydration salt solution; Clinical observation

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前言

腹泻(Diarrhea)是由于多种病因引起的以排便次数增多和排便性状改变为主要临床表现的消化道综合征。儿童腹泻早期如未得到控制,可造成不同程度的脱水症状,轻度可见口渴、皮肤干燥,严重的会导致患儿眼球凹陷、尿量减少等多器官衰竭的危重病情[1-3]。据资料统计,该病症多发于儿童,特别是婴幼儿时期,全世界平均每人每年发病3.2次,约180万人死于腹泻,占全部死亡病因的15%-34%[4]。随着现代医学的发展,临床上更加重视疾病防治及预后,多采取高渗透压的口服补液盐散剂治疗儿童腹泻的脱水症状,但因其渗透压较高,往往不能在短时间内恢复患儿体内离子紊乱及脱水状态[5]。研究发现,低渗口服补液盐可实现对补液及腹泻的双重治疗作用,并且无低钠血症的副作用,安全性高。为了增强疗效、减轻口服补液盐治疗的副作用,我院通过观察治疗前后机体离子紊乱、临床症状恢复时间及临床症状的恢复情况,探究低渗口服补液盐对儿童急性腹泻的轻中度脱水症状的治疗效果,现将结果报道如下。

1 资料与方法

1.1 一般资料

选取2013年3月至2014年7月于我院以急性腹泻为诊断收入院治疗的63例患儿,采用随机数字表分为治疗组和对

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照组。治疗组 31 例,其中男 17 例,女 14 例,平均年龄 6.6± 2.5 岁;对照组 32 例,其中男 16 例,女 16 例,平均年龄 6.1± 2.3 岁。患儿病程 4 天 -2 周,均伴有轻中度脱水症状,一般资料比较差异无统计学意义(P> 0.05)。

1.2 诊断标准

儿童腹泻诊断:①起病突然,大便性状呈水样或黄绿色蛋花汤样、糊状、黏液脓血状等;②排便次数较平时增多伴呕吐症状;③腹泻病程小于等于 2 周;轻度脱水诊断:①失水量占体重的 2%－3%;②头痛、头晕乏力,皮肤弹性稍有降低;③轻度口渴,小便量少,啼哭有泪。中度脱水诊断:①失水量占体重的 3%－10%;②精神萎靡或躁动不安,皮肤粗糙,弹性缺失,眼窝凹陷;③严重口渴,少尿、少汗,啼哭无泪等。

1.3 纳入标准

符合 2009 年《儿童腹泻病诊断治疗原则的专家共识》[6]及 1998 年《中国腹泻病诊治方案》[7]急性腹泻伴轻中度脱水症状的 1 岁 -12 岁患儿,患者及家属自愿参与本实验,并签署知情同意书。方案获得我院伦理委员会批准并全过程跟踪。

1.4 排除标准

①多种原因导致的慢性腹泻;②急性腹泻伴重度脱水症状患儿;③严重肝、肾功能不全及造血系统疾病、肠道炎症并发症患儿;④有过敏体质或对本实验所用药物过敏的患儿;⑤年龄小于 1 岁或大于 12 岁的患儿。

1.5 治疗方法

对照组参照儿科临床用药指南,予口服补液盐散(I)(北京曙光药业有限责任公司,国药准字:H11021321,14.75 g/ 袋),每袋以 500 mL 温水冲开,按患儿体重 50 mL/kg 口服,每日一次,在 6 h 内分口服完毕,3 天为一个疗程,治疗 1 个疗程。治疗组应用口服补液盐溶液(上海强生制药有限公司,商品名:延力,国药准字:H20020554,350 mL/ 瓶),按患儿体重 50 ml/kg 口服,每日一次,在 6 h 内分次口服完毕,3 天为一个疗程,治疗 1 个疗程。治疗后观察患儿血浆内 Na^+、K^+、Cl^- 离子水平、临床症状恢复时间及临床症状改善情况。注意事项:用药期间,禁食生冷辛辣等刺激性食物,保持患儿情绪稳定。

1.6 观察指标及检测方法

观察治疗前后患儿血浆内 Na^+、K^+、Cl^- 离子水平、每小时监测一次临床症状恢复时间及临床症状改善情况。

1.7 疗效判定标准

参照《儿童腹泻病诊断治疗原则专家共识》[6]及《中国腹泻病诊治方案》[7]将本病疗效分为显效、有效和无效三个标准。显效:①吐、泻症状消失;②大便性状及排便次数恢复正常;③脱水、电解质紊乱及酸碱中毒纠正;④体温、精神、饮食恢复正常。有效:①吐、泻症状减轻;②大便性状略稀,排便次数较治疗前缓解;③脱水、电解质紊乱及酸碱中毒基本纠正;④体温正常或低热、精神状态有所好转、食欲较前有所恢复。无效:①吐、泻症状未缓解;②大便性状无变化,排便次数较治疗前未减少;③脱水、电解质紊乱及酸碱中毒无变化或加重;④发热、精神状态差、食欲差;⑤病情加重或者患儿死亡。

1.8 统计学方法

采用统计学软件 SPSS19.0 进行统计学分析,计量资料采用 t 检验,计数资料采用卡方检验处理,以 P< 0.05 为有显著性差异。

2 结果

2.1 两组治疗前后体内电解质水平的比较

治疗后两组患儿体内 Na^+、Cl^- 水平均较治疗前升高,而 K^+ 水平均低于治疗前;且与对照组比较,治疗组 Na^+ 水平显著升高,K^+、Cl^- 水平均显著降低,差异有统计学意义(P< 0.05),见表 1。

表 1 两组患者治疗前后 Na^+、K^+、Cl^- 水平的比较($\bar{x}$± s,mmol/L)

Table1 Comparison of the Na^+, K^+ and Cl^- levels between two groups before and after treatment

Groups		Na^+	K^+	Cl^-
Treatment group	Before treatment	135.2± 4.93	4.25± 0.81	101.9± 4.9
	After treatment	138.4± 2.23$^{\triangle}$	4.01± 0.41$^{\triangle}$	102.1± 3.8$^{\triangle}$
Control group	Before treatment	135.9± 4.03	4.26± 0.59	101.3± 4.5
	After treatment	136.9± 3.31	4.24± 0.33	105.9± 4.1

Note: compared with the control group, $^{\triangle}$P< 0.05.

2.2 两组治疗后脱水症状恢复时间的比较

治疗后每小时监测一次两组患儿脱水症状恢复时间并进行比较,与对照组比较,治疗组疗症状恢复迅速,口渴、眩晕、疲劳、腹痛症状的改善时间均较对照组显著缩短,差异均有统计学意义(P< 0.05),见表 2。

表 2 两组患者各种临床症状改善时间的比较($\bar{x}$± s,h)

Table 2 Comparison of the improvement time of different clinical symptoms between two groups($\bar{x}$± s,h)

Groups	Case(n)	Thirst	Dizziness	Fatigue	Stomach ache
Treatment group	31	5.77± 3.12$^{\triangle}$	2.98± 1.01$^{\triangle}$	5.64± 2.11$^{\triangle}$	6.71± 2.01$^{\triangle}$
Control group	32	9.31± 3.25	4.72± 2.14	8.93± 3.41	13.52± 2.6

Note: compared with the control group, $^{\triangle}$P< 0.05.

2.3 两组治疗后的临床疗效比较

治疗后,两组患儿的临床症状均有所改善,与对照组比较,治疗组的总有效率显著升高,差异有统计学意义($P<0.05$),见表3。

表3 两组患者治疗后的临床疗效比较(%)

Table 3 Comparison of the clinical efficacy after treatment between two groups

Groups	Case (n)	Obvious	Effective	Invalid	Total (%)
Treatment group	31	26	3	1	96.77
Control group	32	16	9	7	78.13
X^2	-	-	-	-	54.108
P	-	-	-	-	0.002

3 讨论

腹泻是儿童最常见的消化系统疾病,急性消化道感染伴腹泻、脱水等症状也是儿童甚至婴幼儿死亡的主要原因[8-11]。当儿童饮食结构复杂多变及饮食卫生得不到保证,就会引发以腹痛、腹泻为主要症状的复杂疾病[12-14]。儿童腹泻有较高的致死率,受到医生及家属的重视[15]。感染因素及非感染因素均能导致急性腹泻的发生,如单纯的母乳性腹泻、上呼吸道感染伴腹泻、因季节变化所致腹泻、饮食杂乱而致消化不良腹泻等[16]。多种复杂的病因中,以感染性腹泻最为常见,主要致病因素如细菌、真菌、病毒、寄生虫等,其中尤以细菌和病毒感染最多见。多种多样的致病菌和病毒也因地、因时、因人而表现为不同的发病症状[17]。临床上针对脱水的治疗方法丰富多样,但都存在局限性[18]。对儿童轻中度脱水,多应用口服补液盐散,但因其渗透压较高,易导致低钠血症,可加重血浆肌酐、尿素氮水平增高,严重的可有肾功能异常[19]。新配方的低渗透压口服补液盐溶液,因其Na^+、K^+、Cl^-等离子搭配合理,易于吸收,可最大程度的避免低钠血症的发生[20]。并且低渗口服补液盐可尽快的恢复脱水症状,从而避免静脉补液治疗,为患儿减轻痛苦。笔者经过试验研究,通过观察治疗后体内Na^+、K^+、Cl^-等离子水平、临床症状恢复时间及症状恢复情况来探究新配方低渗口服补液盐在治疗儿童急性腹泻而致轻中度脱水症状的情况。

本实验中,两组患儿的Na^+、K^+、Cl^-水平经治疗后均有所改善,且治疗组均优于对照组,提示新配方中钠钾氯离子成分含量均衡,易于儿童吸收,是尽快恢复体内离子紊乱很好的治疗手段;治疗后,治疗组患儿的口渴、头晕、乏力、腹痛的改善时间均较对照组明显缩短,提示低渗状态的口服补液盐溶液吸收较快,可尽快恢复机体的缺水状态,葡萄糖可补充患儿缺失的能量,改善缺水症状。治疗后,两组患儿的临床治疗均有很高的有效率,且治疗组临床疗效明显优于对照组。结果提示,新配方的低渗口服补液盐溶液在对儿童急性腹泻而致的轻中度脱水症状疗效迅速、安全可靠,是治疗儿童腹泻脱水的一种有效方法。

综上所述,口服补液盐溶液对儿童急性腹泻的轻中度脱水症状治疗具有很高的临床疗效,能够安全、有效的控制病情,在很大程度上减少静脉输液对患儿造成的负面影响,值得在临床上进行推广。

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