

小儿病毒性腹泻的临床及病原学研究

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内容提要 本文应用电镜、聚丙烯酰胺凝胶电泳等技术,对 158 例秋季腹泻患儿进行病原学研究和疗效对照观察。经细胞培养方法观察,中药对肠道病毒有抑制作用。测定患儿粪便中 SIgA 含量,证明中药有刺激抗体生成的作用。中药组临床疗效优于西药对照组,病毒转阴率为 71.43%,两组比较差异有显著性意义($P < 0.01$)。

关键词 秋季腹泻 轮状病毒 免疫球蛋白 A

病毒性腹泻发病率极高,目前国内尚无抗肠道病毒的特异性药物。我院首次将黑龙江中医研究院新研制的“止泻退热微丸”应用于临床,于 1987 年治疗秋季腹泻患儿(简称秋泻)158 例,就 3 日内控制病因、消除症状的疗效进行中西药(抗生素等)对照观察;应用电镜、聚丙烯酰胺凝胶电泳技术,对治疗 3 日前后的患儿粪便进行病原学研究;测定了粪便中分泌型 IgA (SIgA) 含量,进行疗效验证结果如下。

临床资料

一、一般资料:我科于 1987 年 9 ~ 12 月共收治秋泻患儿 158 例。全部患儿表现有蛋花汤样或稀水样便,大便次数多在每日 10 余次,便常规检查,均初步除外细菌性痢疾。其中,年龄 < 6 个月 43 例,6 ~ 12 个月 69 例, > 12 个月 46 例;男性 102 例,女性 56 例。平均病程 4 天。

将全部患儿随机分成两个观察组:单纯用中药“止泻退热微丸”(葛根、黄连等)治疗组(中药组)共 112 例;西药(氨苄青霉素为主、多酶片、吡哌酸、静脉补液疗法等)治疗组(对照组)共 46 例。全部患者中有 38 例就诊前用过复方新诺明、痢特灵、乳酸菌素等疗效不佳。158 例患儿均有腹泻,154 例患儿表现为不同程度的脱水症状,其中,中药组轻度脱水 66 例、中度脱水 41 例、重度脱水 1 例;对照组轻度脱水 32 例、中度脱水 14 例。中药组与对照组伴随

症状分别为:发热 66 例、39 例;呕吐 56 例、35 例;咳嗽 31 例、11 例。

二、病原学资料:应用电镜(EM)技术随机抽样检验本组患儿粪便 73 例,病毒总检出率 86.3%。其中轮状病毒感染 56 例,占 76.7%;小圆病毒 4 例,占 5.5%;肠腺病毒 3 例,占 4.1%;病毒检查阴性 10 例,占 13.7%。另用聚丙烯酰胺凝胶电泳(PAGE 法)检测本组 78 例患儿的粪便,其中轮状病毒 RNA 电泳阳性者 47 例,阳性率为 60.3%。流行病学资料表明,1987 年秋泻的主要病原为轮状病毒。

治疗方法

患儿随机分组,门诊患儿严格控制可变因素,均留置治疗前和好转时双份粪便送检。

中药组单纯服用黑龙江省中医研究院提供的“止泻退热微丸”(葛根芩连汤加减),每日 3 次,每次视年龄口服 0.5 ~ 1.0g。腹泻脱水重者,适当禁食 6 ~ 12 小时,嘱其自配口服液饮用(每 100ml 电解质溶液含糖 2g)。对高热、呕吐服药困难的 8 例患儿适当配合静脉补液。

对照组 46 例中,有 30 例应用静脉补液疗法,同时静脉滴注氨苄青霉素 1.0g/日,口服多酶片、吡哌酸。其余 16 例未用输液疗法,口服药物治疗同前 30 例。

两组均于大便成形后停药,疗程 < 1 周

结 果

一、抑制肠道病毒的疗效

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两组患儿均于治疗前留置第一份粪便检测病原。于治疗3日内症状好转时送检第二份粪便,以验证药物疗效。

中药组经EM检测的服药前第一份粪便轮状病毒阳性者35例,单纯用“止泻退热微丸”治疗3日内,其病毒转阴及明显减少者25例,转阴率为71.43%;经轮状病毒RNA电泳检测阳性者22例,单纯口服“止泻退热微丸”,3日内病毒转阴或明显减少者16例,转阴率为72.7%,该16例患儿多在2~3日内临床痊愈。因条件所限,其余病例未作类似检测。

对照组按EM法和PAGE法检测8例轮状病毒阳性者,经抗生素等药物治疗3日内,其病毒量未见减弱和消失倾向。虽多数病例在1~3日内退热,但腹泻仍可持续3~5日,多在4日以上好转;其4日以上临床治愈者占63%。经实验室验证,抗生素对肠道病毒无明显抑制作用。

取本组患儿粪便进行体外抑毒试验。经细胞培养的方法证实,“止泻退热微丸”对肠道病毒中的小圆病毒、脊髓灰质炎病毒的增殖均有抑制作用。因受培养条件所限,对轮状病毒的抑制作用未作观察。

选择本组经EM检测轮状病毒阳性的20份粪便,经“止泻退热微丸”治疗3日内的第二份粪便,一并进行粪便中SIgA含量测定;另选2~6岁健康儿童20名,取粪便作为正常对照组。结果表明:该中药使粪便中SIgA的含量($4.06 \pm 0.95 \text{ mg/g}$, $M \pm SD$,下同)明显高于给药前($1.68 \pm 0.22 \text{ mg/g}$)和正常对照组($1.96 \pm 0.31 \text{ mg/g}$),P值均 <0.01 。

二、消除症状的疗效

临床止泻标准:大便成形,便次每日1~2次。中药组112例患儿2日止泻率64%(70例)明显高于对照组19%(9例),两组差异有显著性意义($P < 0.01$)。

临床治愈标准,用药3日内临床症状消失,大便成形,次数正常(每日1~2次)。中药组3日治愈率75.8%,平均治愈天数2.41天;

对照组3日治愈率37.8%,平均治愈天数3.43天,两组比较,P值分别 <0.001 、0.05。

中药组临床疗效判定:(1)显效:单纯给“止泻退热微丸”治疗3日内,症状消失,大便成形者。(2)好转:单纯服用“止泻退热微丸”治疗3日,症状消失,便次明显减少,大便尚未成形者。(3)有效:单纯给“止泻退热微丸”治疗,适当补液后痊愈者。(4)无效:因高热、呕吐、口服药物困难、改用其它药物治疗者。中药组112例中,显效85例(75.9%),好转19例(16.9%),有效4例(3.6%),无效4例(3.6%),总有效率达96.4%。在治愈患儿中有2例停药10余日后腹泻复发。提示病毒性腹泻的治疗不宜急于停药,应于大便成形后再服药1~2天。

讨 论

止泻退热微丸具有抑制肠道病毒,快速消除临床症状的显著疗效。免疫药理学研究结果表明,“止泻退热微丸”能促进抗体生成,使作为肠道局部抗感染的重要抗体SIgA的含量明显高于治疗前和正常对照组。因此认为,“止泻退热微丸”的作用机理可能与抑制肠道病毒增殖,控制感染因素,改善肠道吸收功能有关。

单纯应用中药“止泻退热微丸”治疗腹泻,90%以上不需静脉输液,少数患儿适当配给口服补液。对重症腹泻,伴发高热、呕吐者,仍需配合输液治疗,以纠正电解质紊乱。该中药治疗迁延性腹泻亦疗效显著,少数患儿因滥用抗生素,发生菌群紊乱者,疗效欠佳。

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**Clinical Study of Effect of Tiao-Zhi-Tang(调脂汤)
on Lipoprotein and Apolipoprotein in Hyperlipemia patients**

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In this research, 68 patients suffering from hyperlipemia were divided into observation group taking Tiao-Zhi-Tang(TZT) and control group taking inositol and Mai Tong(脉通) at random and matched-pair, and the serum levels of HDL-c, HDL2-c, LDL-c, Apo A-I and Apo B were measured respectively by the methods of polyethylene glycol precipitation separation and single radial immunodiffusion. The results showed that there were significant difference in the levels of lipoprotein, apolipoprotein between the patient groups and the healthy group before taking medicines. After taking medicines for four weeks, the serum levels of total cholesterol, triglyceride(TG), LDL-c and Apo B were lowered and the serum levels of HDL-c, HDL2-c and Apo A-I were elevated in the observation group. The serum level of TG was lowered and the serum levels of HDL2-c, Apo A-I were elevated in the control group. The effects of TZT, with the serum levels of LDL-c and Apo B being lowered and the serum level of HDL-c being elevated, were more beneficial than inositol and Mai Tong. These results suggested that TZT had a good effect on regulating the lipoprotein metabolism.

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Investigation on Clinical Therapy and Aetiology of Viral Diarrhea in Children

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158 cases of autumnal diarrhea in children were probed into their aetiology, determination of SIgA content and verification of the effect Chinese herbs by using electron microscope and polyacrylamide gel electrophoresis techniques.

The result indicated that therapeutic effect of Chinese herbs on rotavirus diarrhea was more effective than western medicine. The inhibitory rate of virus was 71.43%.

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**The Influence of Finger Pressing Massage on cAMP and cGMP
in the Cerebrospinal Fluid of Prolapsed Intervetebraal Disc**

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This paper used RIA method to observe 11 cases of prolapsed intervetebral disc patients, detect the change of cAMP and cGMP in the cerebrospinal fluid before and after finger pressing massage in acupuncture point Weizhong(U.B. 40, 委中) and Chengshan(U.B. 57, 承山) in order to discuss the mechanism of analgesia of finger pressing massage.

The results showed that the pain was relieved after finger pressing massage. cAMP of the cerebrospinal fluid increased from 0.51 ± 0.19 to 0.63 ± 0.13 pm/ml, in average 32% higher than that before the therapy($P < 0.05$). Since cGMP decreased from 30.52 ± 26.42 to 23.20 ± 16.91 pm/ml, it showed that the mechanism of analgesia of finger pressing massage might be due to the fact that the therapy excited selectively endogenous analgesia system, caused the increase of endorphin releasing, and was accompanied by the regulation of cAMP and cGMP.

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