

# 婴幼儿腹泻的中西医结合病因病理及 疗法进一步探讨

福建省立医院 叶孝礼

我们于 1958 年开始组织中西医力量,对腹泻的病因病理、辨证分型治疗及疗效机理进行了中西医结合临床研究。兹综合二十二年来实践探讨如下。

## 病因病理

凡脾胃功能失调,以腹泻为主要症状而不夹脓血者,祖国医学称为泄泻。婴幼儿泄泻的病因主要由于感受外邪、内伤乳食或脾胃虚弱引起。小儿感受暑湿时邪,蕴郁肠胃,以致水湿滞留而为下利。乳食不节也可损伤脾胃而致泄泻。但外邪与伤食均属于外因,而更主要的是小儿脾胃虚弱,在外因作用下极易引起脾胃功能失调,水湿内生而为泄泻。

现代医学认为腹泻的病因与感染、饮食、气候及机体免疫力低下等有关。祖国医学所谓外邪可能包括环境、气候因素(风、寒、暑、湿等)及感染因素(细菌、病毒等)。

现代医学对感染性腹泻的病理生理研究,近年有了新的进展,明确指出由细菌感染引起水泻(如常见的产肠毒素性埃希氏大肠杆菌)的发病机理是由于大肠杆菌所产生的肠毒素作用。当肠道感染时,细菌在肠道产生肠毒素,刺激腺苷酸环化酶,使环磷酸腺苷增加,促使肠粘膜细胞发生过度分泌,液体积聚于肠腔而发生腹泻。病毒性腹泻(如最常见的轮状病毒)发病原因是由于病毒颗粒侵入小肠上部的肠壁细胞内,绒毛细胞毁坏,使水、电解质吸收发生障碍,水分停留肠内发生腹泻。这两类感染性腹泻的肠管均无炎症反应,而只是分泌增多或吸收障碍<sup>(1~3)</sup>,故临床均表现为水泻,而不夹脓血。现代医学的肠功能紊乱(分泌增多或吸收障碍),水分停留肠内发生腹泻的新观点与祖国医学所谓:“脾胃功能失调,运化不健,水湿内生致泻”的机理,是有相符合之处。

## 辨证治疗

中医治疗腹泻一般按寒、热、虚、实(饮食)辨证论治,为便于中西医结合临床研究,简化为以下三型:

一、外感型(感染性腹泻),临床上有偏热、偏寒

之分,但婴幼儿以湿热型多见。常用方剂如加味葛根芩连汤(葛根、黄芩、黄连、泽泻、甘草、茯苓、木香)。

二、伤食型(单纯饮食因素引起腹泻),常用方剂如保和丸加减(鸡内金、麦芽、山楂、茯苓)。

三、脾虚型(迁延性腹泻),常用方剂如加减参苓白术散(党参、白术、茯苓、淮山药、扁豆、草薢、炮姜)。

1958~1978 年按以上辨证分型中西医结合治疗住院患者 961 例,治愈率为 92.3%。据 1977 年 82 例辨证分型治疗观察,比西医对照组的止泻及退热时间均缩短 1~2 天,差别显著<sup>(4)</sup>。

临床常见腹泻以外感型及伤食型占多数,一般外感型腹泻以采用中医中药治疗更为宜。因细菌性腹泻主要致病菌为埃希氏大肠杆菌(63.9%)<sup>(4)</sup>,对常见抗菌素如四环素、土霉素已全部耐药<sup>(5)</sup>,而且目前认为产肠毒素性埃希氏大肠杆菌腹泻主要发病机理是肠分泌增加,非肠炎症所致,抗菌消炎药物对肠毒素治疗是无效的。至于病毒性腹泻抗菌药物更是无能为力。大多数急性腹泻有自愈倾向,不应滥用抗菌药物,以免发生菌群失调及二重感染。

目前对细菌性腹泻的治疗药物研究,也着手于抑制肠分泌药物的探索。国外对黄连的研究为一例证,将家兔小肠分段结扎,注入肠毒素后,可见肠管肿胀,肠腔内分泌增多,再注入黄连素可观察到肿胀的肠管缩小,肠腔内分泌明显被抑制,水分减少。实验说明了黄连治泻机理是抑制肠分泌<sup>(6)</sup>。1980 年我们与福建卫生学校协作,将分离出埃希氏大肠杆菌作家兔肠段结扎试验,注射肠毒素后 9 株中有 2 株见到肠分泌增多,其中 1 株肠分泌明显增多,肠腔内有液体积聚现象。对抑制肠分泌药物的选择,中医中药是有其广阔前途,除黄连外,尚有多种治泻显效药物。我们治疗外感型湿热泻采用的葛根芩连汤具有清热燥湿作用,疗效显著<sup>(4)</sup>。据实验葛根芩连汤抑菌力不强,其疗效机理可能与抑制肠分泌有关。方剂中黄连已经证实有抑制分泌作用,葛根、黄芩与黄连有相同的清热燥湿性能,其对肠分泌的抑制作用可能相似,三者

配伍应用, 是否有增强抑制功能, 有待进一步探讨。

秋季腹泻目前认为由病毒感染引起, 我们曾于1979年初步证实本地区秋泻病原主要为轮状病毒<sup>(4)</sup>, 与国内外所见相同<sup>(7,8)</sup>。本病发病机理为小肠绒毛上皮细胞被毁坏, 而新生细胞功能不全, 影响肠吸收能力, 一俟新细胞成熟后, 其功能可逐渐恢复, 故本病为自限性疾病<sup>(3)</sup>, 但如治疗适当, 是可缩短腹泻病程。1975~1978年我们采用葛根芩连汤治疗, 全部治愈<sup>(9)</sup>。曾对治疗病例作E-玫瑰花结试验, 治疗后比治疗前有明显提高, 初步认为其疗效机理可能与提高机体免疫力有关<sup>(9)</sup>, 从而促进新生绒毛上皮细胞功能成熟, 缩短了病程。

### 讨论与小结

一、腹泻的发病中医认为由于脾胃功能失调, 水湿内生所致的概念, 与现代医学的细菌肠毒素作用引起肠分泌增加或病毒感染影响肠吸收, 以致大量水分积聚的观点是相符合的。中西医对腹泻的发病均认为系由于肠功能紊乱, 在病因与病理方面已有了共同的认识。

二、通过动物实验已初步证实本地区致病性埃希氏大肠杆菌毒素有增加肠分泌现象。据黄连素有抑制肠分泌原理, 初步认为葛根芩连汤对细菌性腹泻的疗效机理可能与抑制肠分泌有关。目前国外治泻药物研究倾向于抑制肠分泌药物的探索, 并求助于传统医学的发掘。我们认为中医药除黄连外, 具有清热燥湿药物甚多, 有待探讨。世界卫生组织已同意将我们的研究, 考虑列入世界腹泻研究规划中的传统药物临床实验研究项目。

三、从临床长期实践, 我们认为采用中西医结合治疗婴幼儿腹泻是有其理论基础与科学依据。实践已证明中西医结合治泻确是疗效高、副作用少、经济方便, 值得推广。对一般外感型可单用中医治疗, 脱水时配合液体疗法; 中毒性细菌性腹泻可短期加用抗菌素并配合输液及对症处理, 待危象解除后, 还以中医

治疗为宜。葛根芩连汤对湿热泻疗效显著, 已沿用多年, 配方中的黄连疗效机理, 现代医学已加以阐明, 可大力推荐。

四、腹泻治疗除药物外, 中医对饮食疗法甚为重视, 主张在病初期暂禁乳食, 予以米汤或节乳。据现代医学研究, 感染性腹泻小肠粘膜上皮细胞有损坏, 影响双糖酶产生, 可出现双糖酶缺乏症, 因而腹泻时不宜过早或过多进食双糖, 特别是乳糖在人乳和牛乳中均含有, 故腹泻患儿喂乳食应慎重, 但禁食时间不宜过久。

五、目前世界卫生组织在大力推广口服补液盐(ORS)治疗轻度及中度脱水, 疗效显著, 其成功率达95%以上<sup>(10)</sup>。我们认为在中医药治疗基础上配合ORS溶液口服, 能进一步提高疗效, 已在临床实验中, 有待取得经验后推广。

(本文有关病原学检查, 由福建省卫生防疫站及福建省卫生学校协作, 特此致谢。)

### 参 考 文 献

1. Greenough WB III: 腹泻脱水的生理与临床. 世界卫生组织区域间腹泻疾病训练班教材, 孟加拉·达卡, 1980
2. Roger Glass: 腹泻疾病的流行病学, 同上
3. Sack RB: 腹泻的病理生理. 全国腹泻讲习班记录稿, 1981
4. 叶孝礼等: 福州地区小儿腹泻的病因分析及中草药人苋的疗效观察. 孟加拉腹泻班及全国腹泻班宣读资料, 1980~1981
5. 叶孝礼: 中西医结合治疗婴幼儿腹泻的体会. 中华医学杂志 58: 209, 1978
6. Sack RB: 黄连素对腹泻作用机理探讨. 全国腹泻讲习班记录稿, 1981
7. Sack DA: 腹泻病毒学, 世界卫生组织区域间腹泻疾病训练班教材, 孟加拉·达卡, 1980
8. 庞其方等: 婴幼儿秋季急性胃肠炎病原——轮状病毒研究. 中华医学杂志 58: 589, 1979
9. 叶孝礼: 中医治疗婴幼儿腹泻及急性出血性小肠炎的发展. 中华儿科杂志 17: 136, 1979
10. Mahalanabis D: 口服补液疗法——最近进展. 世界卫生组织控制腹泻规划组织资料, 1980

## 悼 念 陶 甫 教 授

天津医院副院长、骨科主任、天津骨科研究所副所长、天津骨科学会会长、中国中西医结合研究会理事陶甫教授, 因病不幸于1982年4月19日在天津逝世, 终年69岁。

陶甫教授生前热爱中西医结合事业, 对我国骨科学及骨科中西医结合事业做出了较大贡献, 对其不幸逝世, 我们表示沉痛悼念!

本刊编委会

## A Clinical Observation on 546 Cases of Coronary Heart Disease Treated with Cyclovirobuxine D

*Division of Hygiene, Logistics Department, Nanjing Military Area Air Force*

Cyclovirobuxine D is a kind of active constituent extracted from Chinese *Buxus microphylla* Sieb et Zucc. var. *sinica* Rehd. et Wils. In recent years, pharmacologic tests and clinical applications have proved that it can be used to treat coronary heart disease and cardiac arrhythmia. The analysis of these cases are as follows:

Cyclovirobuxine D has anti-angina effect. But of 360 cases of angina pectoris, it was effective in 323 cases having a curative rate of 89.7%. Among 146 cases of the classified groups, it was effective in 44 cases (88%) in the mild angina pectoris group (50 cases), 55 cases (94 %) in the moderate group (58 cases), and 36 cases (95%) in the severe group (38 cases). Evidently the curative effect on the severe group was the best of the three.

Among 499 cases of the improved electrocardiogram, it was effective in 150 cases, having a curative rate of 30 %, and 182 cases were improved (36.5%). This amounts to a total of 332 cases with a curative rate of 66.5%. This is obviously higher than those of the comparative groups.

Cyclovirobuxine D has an obvious action against cardiac arrhythmia, particularly ventricular extrasystole. Out of 115 cases of arrhythmia in the above group, it was effective in 51 cases with a curative rate of 44.3%; 33 cases were improved (28.7%); and 31 cases were ineffective (27.0%). This amounts to a total of 84 cases with a curative rate of 73.0%.

(Original article on page 216 )

## The Efficacy of Qigong (Breathing Exercise) and Antihypertensive Drug Treatment in 426 Hypertensive Patients and the Change of Plasma Dopamine- $\beta$ -Hydroxylase Activity

Wang Chongxing ( 王崇行 ), You Chuanyi ( 尤传一 )\*, et al

*Shanghai Hypertension Research Institute*

Clinical and experimental studies on Qigong ( 气功 , breathing exercise) treatment for hypertension indicate that breathing exercise may actively regulate the internal function of human body, and its efficacy in the treatment of hypertension may be claimed as reliable.

426 hypertensives under uninterrupted and consistent medication were divided into two groups. The first is the Qigong group (304 cases), i.e., Qigong with regulatory medication, which was followed up for one year. This group had a total effective rate of 86.2%, among which the rate of marked efficacy was 42.5%. The control group (122 cases ) with regulatory medication only was also followed up for one year. However, its total effective rate and the rate of marked efficacy were 67.2% and 22.5% respectively. This indicates that the efficacies for these two groups do differ significantly ( $P < 0.01$ ).

Many experimental data suggest that plasma dopamine- $\beta$ -hydroxylase (D $\beta$ H) activity may reflect the sympathetic nervous function. 26 hypertensives (2nd stage) with breathing exercise over one year were investigated for their plasma D $\beta$ H activity by means of cross-over and self-control after and before breathing exercise and rest. D $\beta$ H activity before breathing exercise and rest is  $19.71 \pm 1.47$  IU (mean  $\pm$  SEM) and  $19.29 \pm 1.47$  IU respectively. It decreases by  $1.47 \pm 0.69$  IU after breathing exercise but increases by  $0.57 \pm 0.66$  IU after rest. The difference between the values of change of plasma activity after and before breathing exercise is statistically significant ( $P < 0.05$ ). However, the difference between the values after and before rest is relatively insignificant ( $P > 0.05$ ). The differences of the absolute values of change, or, between the percentages of change of D $\beta$ H activity in the two groups are both statistically significant ( $P < 0.05$ ). It is suggested that breathing exercise can reduce the excitability of sympathetic nervous activity and regulate the function of unbalanced autonomous nervous system.

(Original article on page 218 )

\*postgraduate

## A Further Investigation on Pathogeny, Pathology and Therapy in Infantile Diarrhoea by Means of TCM-WM

Ye Xiaoli ( 叶孝礼 )

*Fujian Provincial Hospital, Fuzhou*

It is held in traditional Chinese medicine that diarrhoea is caused by "disorders of spleen and stomach function" (脾胃失调) and "gathering and brewing of water and dampness in the body" (水湿内生). Experiments and research of modern medicine have shown that disturbances of enteric function (excessive secretion or malabsorption) which lead to water retention in intestine are the cause of infectious diarrhoea. This has created the condition for a further investigation of pathogeny and pathology by means of TCM-WM, and offered scientific evidence for the theory of TCM.