

doi: 10.13241/j.cnki.pmb.2019.23.020

降气止血汤辅助法莫替丁对消化性溃疡急性出血患儿 TXB2、6-Keto-PGF1 α 水平的影响 *

闫黎娜¹ 李彩虹^{2a} 周晓燕³ 郭彦孜¹ 何 平¹

(1 陕西中医药大学第二附属医院新生儿科 陕西 咸阳 712000; 2 延安大学附属医院洛川分院儿科 陕西 延安 727400;

3 陕西中医药大学附属医院肿瘤二科 陕西 咸阳 712000)

摘要 目的: 探究降气止血汤辅助法莫替丁对消化性溃疡急性出血患儿血浆血栓烷 B2 (Thromboxane B2, TXB2)、6-酮前列腺素(6-keto-prostaglandin, 6-Keto-PGF1 α)水平的影响。**方法:** 选择我院 2015 年 10 月-2018 年 10 月收治的 60 例消化性溃疡急性出血患儿,经随机数字表法分为两组,每组 30 例。对照组采用法莫替丁进行治疗,研究组在对照组基础上联合降气止血汤进行治疗。对比两组的治疗总有效率、治疗前后凝血功能指标和 TXB2、6-Keto-PGF1 α 水平的变化。**结果:** 治疗后,研究组的治疗总有效率显著高于对照组($P<0.05$);两组的凝血酶时间(Thrombin time, TT)、凝血酶原时间(Prothrombin time, PT)、凝血活酶时间(activated partial thromboplastin time, aPTT)及 6-Keto-PGF1 α 水平均显著低于治疗前,血小板计数(Platelet count, PLT)、纤维蛋白原(Fibrinogen, Fbg)及 TXB2 水平均明显高于治疗前,且研究组以上指标改善更明显($P<0.05$)。**结论:** 降气止血汤辅助法莫替丁治疗消化性溃疡急性出血患儿的效果显著优于单用法莫替丁治疗,可能与其有效改善患儿的凝血功能及 TXB2 和 6-Keto-PGF1 α 水平有关。

关键词: 降气止血汤;法莫替丁;消化性溃疡急性出血;血栓烷 B2;6-酮前列腺素

中图分类号: R573.1 **文献标识码:** A **文章编号:** 1673-6273(2019)23-4487-04

Effect of Jiangqi Zhixue Decoction and Famotidine on the TXB2 and 6-Keto-PGF1 α Levels in Children with Peptic Ulcer Acute Bleeding*

YAN Li-na¹, LI Cai-hong^{2a}, ZHOU Xiao-yan³, GUO Yan-zi¹, HE Ping¹

(1 Department of Neonatology, the Second Affiliated Hospital of Shaanxi University of Traditional Chinese Medicine, Xianyang, Shaanxi, 712000, China; 2 Department of Pediatrics, Luochuan Branch, Affiliated Hospital of Yan'an University, Yan'an, Shaanxi, 727400, China; 3 Department of Oncology, Affiliated Hospital of Shaanxi University of Traditional Chinese Medicine, Xianyang, Shaanxi, 712000, China)

ABSTRACT Objective: To investigate the effect of Jiangqi Zhixue Decoction on the TXB2 and 6-Keto-PGF1 α levels in children with peptic ulcer acute bleeding. **Methods:** Sixty children with peptic ulcer acute bleeding who were admitted to our hospital from October 2015 to October 2018 were randomly divided into two groups, with 30 cases in each group. The control group was treated with famotidine, and the study group was treated with Jiangqi Zhixue Decoction on the basis of control group. The total effective rate, changes of TXB2, 6-Keto-PGF1 α levels and coagulation function indicators before and after treatment were compared between two groups. **Results:** After treatment, the total effective rate of study group was significantly higher than that in the control group ($P<0.05$). The levels of TT, PT, aPTT and 6-Keto-PGF1 α in the two groups were significantly lower than those before treatment, and the PLT, Fbg and TXB2 levels were significantly higher than before treatment, and the improvement of the above indicators in the study group were superior to those of the control group($P<0.05$). **Conclusion:** Jiangqi Zhixue Decoction combined with famotidine was significantly better than motidine alone in the treatment of children with peptic ulcer acute bleeding, which may be related to the improvement of TXB2 and 6-Keto-PGF1 α levels.

Key words: Jiangqi Zhixue Decoction; Famotidine; Peptic ulcer acute bleeding; TXB2; 6-Keto-PGF1 α

Chinese Library Classification(CLC): R573.1 **Document code:** A

Article ID: 1673-6273(2019)23-4487-04

前言

小儿消化性溃疡是一种儿内科常见疾病,多指因各种原因

导致的小儿十二指肠及胃慢性溃疡,可发生于各年龄段的儿童中,主要由生活习惯不良、饮食不当、药物刺激、家族史等因素引发,临床表现为食欲不振、腹痛等症状^[1-3]。小儿消化性溃疡与

* 基金项目:陕西省中医管理局中医药科研项目(JCPT004)

作者简介:闫黎娜(1982-),女,硕士,主治医师,研究方向:中医儿科,电话:15349277946, E-mail: yanlina19821030@163.com

△ 通讯作者:李彩虹(1964-),女,本科,副主任医师,研究方向:儿内科,电话:13892132889, E-mail: 854038137@qq.com

(收稿日期:2019-06-03 接受日期:2019-06-28)

功能性消化不良、小儿厌食症等相似,且因患儿不能准确表述自身感受,导致容易与其他疾病混淆,引起医师误诊,延误患儿病情。

消化道出血是消化性溃疡主要的并发症之一,具有起病急、变化快、发生率高等特点,且失血量超过机体血容量的 15 % 时,患儿易发生出血休克等不良后果,严重影响其身心健康^[4-6]。目前,临床上常使用质子泵抑制剂、H₂受体抑制剂等药物治疗,其通过抑制胃酸分泌,改善胃内 pH,从而达到止血的目的^[7-9]。近年来,以中药汤剂为主的中医药疗法正逐步应用于消化性溃疡出血患者,且止血效果和再出血率均显著低于西医单一疗

法^[10-13]。本研究分析了降气止血汤辅助法莫替丁对消化性溃疡急性出血患儿的疗效及其对 TXB₂、6-Keto-PGF₁α 水平的影响,旨在为消化性溃疡急性出血的临床用药提供参考。

1 资料与方法

1.1 研究对象

选择我院 2015 年 10 月 -2018 年 10 月收治的 60 例消化性溃疡急性出血患儿,经随机数字表法均分为两组,两组的基础资料比较差异无统计学意义($P>0.05$),具有可比性,见表 1。

表 1 两组基础资料的比较

Table 1 Comparison of basic data between the two groups

Groups	Cases	Male/Female	Average age(year)	Average onset time (h)	Ulcer type	
					Duodenum	Gastric ulcer
Research group	30	16/14	4.5± 1.2	15.3± 4.2	18	12
Control group	30	17/13	4.7± 1.1	15.4± 4.0	19	11

1.2 纳入和排除标准

纳入标准:(1)符合西医小儿消化性溃疡急性出血和中医血症之“胃痛”的诊断标准;(2)年龄≤9岁;(3)患儿的家属均对本研究的方法、用药、风险知情。排除标准:(1)严重心、肝、肾障碍者;(2)对本研究药物过敏者;(3)入组前已经治疗者;(4)不能坚持治疗者。

1.3 治疗方法

对照组:使用法莫替丁(阿斯泰来制药(中国)有限公司,国药准字 H21023631,20 mg/片)治疗,20 mg/次,2 次/d。研究组:在对照组基础上联合降气止血汤治疗,药物组成为:黄芪 30 g,煅瓦楞子 25 g,海螵蛸 20 g,党参 15 g,丹参 15 g,茯苓 15 g,制大黄 15 g,白芨 15 g,炒白芍 15 g,白术 12 g,莪术 10 g,仙鹤草 10 g,红花 10 g,三七 10 g,炙甘草 10 g,每日一剂,取上述药物用水煎煮,浓缩收汁至 300 mL,分早晚两次温服。

两组均连续治疗 4 周。

1.4 观察指标

(1)疗效评价标准:用药后 24 h 内出血停止,呕吐物、胃管

抽吸物及大便颜色均显示正常即为痊愈;用药后 24 h 内出血停止,呕吐物、胃管抽吸物及大便颜色基本恢复正常即为显效;用药后 48 h 内出血停止,呕吐物、胃管抽吸物及大便颜色基本恢复正常即为有效;无上述表现者即为无效;(2)于清晨空腹取两组的外周静脉血 5 mL,采用自动凝血仪对治疗前后的 TT、PT、aPTT、Fbg、PLT 等凝血功能指标进行检查;(3)采用 Cobas C312 型全自动生化分析仪检测治疗前后的 TXB₂、6-Keto-PGF₁α 水平。严格按照说明书操作。

1.5 统计学分析

采用 SPSS20.0 分析数据,计数资料以%表示,组间比较经 χ^2 检验;计量资料以均数±标准差表示,组间比较经 t 检验;以 $P<0.05$ 为差异有统计学意义。

2 结果

2.1 两组治疗总有效率对比

治疗后,研究组的治疗总有效率为 96.67%,显著高于对照组(73.33%, $P<0.05$)。见表 2。

表 2 两组治疗总有效率的对比[例(%)]

Table 2 Comparison of the total efficacy between two groups[n(%)]

Groups	Cases	Heal	Significant	Effect	Effect invalid	The total efficacy
Research group	30	20(66.67)	6(20.00)	3(10.00)	1(3.3)	29(96.67)*
Control group	30	10(33.33)	7(23.33)	5(16.67)	8(26.67)	22(73.33)

Note: * $P<0.05$, compared with the control group.

2.2 两组治疗前后凝血功能指标对比

治疗前,两组的凝血指标比较差异无统计学意义($P>0.05$);治疗后,两组的 TT、PT、aPTT 水平均比治疗前明显降低,而 Fbg、PLT 水平均比治疗前显著升高,且研究组以上指标改善较对照组更显著($P<0.05$),见表 3。

2.3 两组治疗前后 TXB₂、6-Keto-PGF₁α 水平对比

治疗前,两组的 TXB₂、6-Keto-PGF₁α 比较差异无统计学

意义($P>0.05$);治疗后,两组的 TXB₂ 水平均比治疗前显著升高,6-Keto-PGF₁α 水平均比治疗前明显降低,且研究组以上指标改善较对照组更显著($P<0.05$),见表 4。

3 讨论

消化性溃疡急性出血多采用质子泵抑制剂或 H₂受体抑制剂进行治疗^[14-16],法莫替丁作为胍基噻唑的衍生物,属于第三代

H2受体拮抗剂,能够抑制胃酸的形成,从而有利于机体胃粘膜屏障的重建,达到止血的目的^[17-19]。中医认为该病属“胃脘痛”、“便血”等范畴,主要由机体情志失调、饮食失节导致瘀血阻滞、血不归经引起,治疗应以健脾和中、益气摄血为主^[20-21]。

表3 两组治疗前后的凝血功能指标对比(n=30)

Table 3 Comparison of the coagulation function index between two group before and after treatment(n=30)

Groups	TT(s)		PT(s)		aPTT(s)	
	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment
Research group	17.93± 2.44	15.81± 2.06 ^{#*}	14.45± 1.53	12.16± 1.27 ^{#*}	37.46± 2.34	31.77± 2.02 ^{#*}
Control gorup	18.07± 2.28	16.90± 2.13 [#]	14.51± 1.34	13.38± 1.46 [#]	37.62± 2.43	35.36± 2.21 [#]

Continue table

Groups	Fbg(g/L)		PLT(× 10 ⁹ /L)	
	Before treatment	After treatment	Before treatment	After treatment
Research group	1.89± 0.52	3.03± 0.47 ^{#*}	184.69± 34.81	259.25± 38.84 ^{#*}
Control gorup	1.91± 0.49	2.42± 0.51 [#]	186.73± 31.94	218.14± 39.12 [#]

Note: [#]P<0.05, compared with before treatment in the same group; *P<0.05, compared with the control group.

表4 两组治疗前后 TXB2、6-Keto-PGF1α 水平的对比(n=30,pg/mL)

Table 4 Comparison of the TXB2, 6-Keto-PGF1α levels between two gorups before and after treatment(n=30, pg/mL)

Groups	TXB2		6-Keto-PGF1α	
	Before treatment	After treatment	Before treatment	After treatment
Research group	84.51± 17.32	134.89± 18.74 ^{#*}	29.58± 6.45	18.05± 5.84 ^{#*}
Control gorup	85.11± 17.03	110.45± 18.24 [#]	29.46± 6.67	23.87± 6.13 [#]

Note: [#]P<0.05, compared with before treatment in the same group; *P<0.05, compared with the control group.

本研究所用降气止血汤由黄芪、煅瓦楞子、海螵蛸、党参、丹参、茯苓、制大黄、白芨、炒白芍、白术、莪术、仙鹤草、红花、三七、炙甘草等,方中各药联合使用,具有疏肝泄热、降气止血等功效^[22,23]。本研究结果显示降气止血汤辅助法莫替丁治疗消化性溃疡急性出血患儿的效果显著,提示降气止血汤各方剂联合使用,共同发挥疗效,互相促进。此外,降气止血汤辅助法莫替丁治疗消化性溃疡急性出血患儿,能有效的改善凝血功能,提示降气止血汤主要是通过提高机体的细胞和体液免疫,增强患儿的免疫力,从而改善凝血功能^[24]。

目前,临床上对消化性溃疡急性出血的发病机制尚未研究清楚,TXA2是一种作用较强的血管收缩物质,其可有效诱发机体血小板的聚集^[25],而前列环素 PGI2具有抑制血小板聚集和舒张外周血管的作用^[26]。TXA2与前列环素 PGI2水平常作为判断机体溃疡出血程度和血液凝固功能的重要指标,但其检测难度较大,多以代谢产物 TXB2和 6-Keto-PGF1α代为检测^[27,28]。本研究结果显示降气止血汤辅助法莫替丁可有效调节消化性溃疡急性出血患儿的 TXB2和 6-Keto-PGF1α水平^[29,30],提示降气止血汤辅助法莫替丁能够有效的提高血浆的稳态,改善血液凝固功能,减轻出血的程度。

综上所述,降气止血汤辅助法莫替丁治疗消化性溃疡急性出血患儿的效果显著优于单用法莫替丁治疗,可能与其有效改善患儿的凝血功能及 TXB2和 6-Keto-PGF1α水平有关。本研究也有一定的不足,如样本量少,结果可能存在偏移,同时观察时间短,对于不良反应没有统计,后续要进一步研究。

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