

doi: 10.13241/j.cnki.pmb.2018.07.037

兰索拉唑与奥美拉唑治疗活动期胃溃疡的效果及对血清抗氧化因子的影响*

罗炎杰¹ 王晓辉^{2Δ} 李宇奇¹ 张昆龙¹ 邓 静¹

(1 91458 部队医院 海南 三亚 572000; 2 海军总医院 北京 100048)

摘要 目的:观察和比较兰索拉唑与奥美拉唑治疗活动期胃溃疡的临床效果及其对患者血清抗氧化因子水平的影响。**方法:**选取2016年1月至2017年1月我院收治的活动期胃溃疡患者88例,将其随机分成研究组和对照组,每组各44例。对照组给予奥美拉唑于睡前口服治疗,一次20mg,每日1次。研究组给予兰索拉唑于睡前口服治疗,一次30mg,每日1次。两组患者均以7d为一个疗程,连续治疗8个疗程。比较两组患者的临床总有效率和治疗前后血清超氧化物歧化酶(Superoxide dismutase, SOD)、丙二醛(Methylene dioxyamphetamine, MDA)、内皮素-1(Endothelin-1, ET-1)和一氧化氮(Nitric oxide, NO)水平的变化。**结果:**(1)研究组治疗总有效率为97.73%,对照组治疗总有效率为79.55%,研究组治疗总有效率显著高于对照组($P<0.05$);(2)治疗前,两组患者血清SOD、MDA、ET-1和NO水平比较差异无统计学意义($P>0.05$),研究组患者治疗后血清MDA、ET-1水平均明显低于对照组,血清SOD、NO水平均显著高于对照组($P<0.05$)。**结论:**兰索拉唑治疗活动期胃溃疡的临床效果明显优于奥美拉唑,可能与其显著提高患者血清SOD、NO水平及降低血清MDA、ET-1水平有关。

关键词:兰索拉唑;奥美拉唑;活动期胃溃疡;SOD;MDA;ET-1;NO

中图分类号:R573.1 **文献标识码:**A **文章编号:**1673-6273(2018)07-1369-03

A Study on the Clinical Efficacy of Lansoprazole and Omeprazole in the Treatment of Active Gastric Ulcer and Effect on the Serum Antioxidant Factors*

LUO Yan-jie¹, WANG Xiao-hui^{2Δ}, LI Yu-qi¹, ZHANG Kun-long¹, DENG Jing¹

(1 91458 Troop Hospital, Sanya, Hainan, 572000, China; 2 General Hospital of Navy, Beijing, 100048, China)

ABSTRACT Objective: To observe and compare the clinical efficacy of lansoprazole combined with omeprazole in the treatment of active gastric ulcer and effects on the serum antioxidant factors levels. **Methods:** 88 cases of patients with active gastric ulcer in our hospital admitted from January 2016 to January 2017 were selected and randomly divided into the study group and the control group, with 44 cases in each group. The control group was given omeprazole oral treatment before sleep, once 20 mg daily. The study group was given lansoprazole oral treatment before sleep, once 30mg daily. 7 days were as a course of treatment, both groups continuously treated for 8 courses. The clinical efficacy and serum SOD, MDA, ET-1 and NO levels before and after treatment were respectively observed and compared between the two groups. **Results:** (1) The total effective rate was 97.73% in the study group, which was significantly higher than that of the control group (79.55%, $P<0.05$). (2) There was no significant difference in the serum SOD, MDA, ET-1 and NO levels between the two groups before treatment ($P>0.05$). After treatment, the levels of serum MDA and ET-1 in the study group were significantly lower than those in the control group, but the levels of serum SOD and NO in the study group were significantly higher than those in the control group ($P<0.05$). **Conclusion:** Lansoprazole had better clinical efficacy in the treatment of active gastric ulcer compared with omeprazole, which may be attributed to the improvement of serum levels of SOD and NO, and reduction the serum levels of MDA and ET-1.

Key words: Lansoprazole; Omeprazole; Active gastric ulcer; SOD; MDA; ET-1; NO

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

Article ID: 1673-6273(2018)07-1369-03

前言

胃溃疡(gastric ulcer, GU)是位于贲门至幽门之间的慢性溃

疡,是消化性溃疡最常见的一种,主要是指胃黏膜被胃消化液自身消化而造成的超过粘膜肌层的组织损伤,其典型表现为饥饿不适、饱胀嗝气、泛酸或餐后定时的慢性中上腹疼痛,严重时

* 基金项目:国家"十二五"重大专项(2012ZX10002003-004-006)

作者简介:罗炎杰(1982-),主治医师,研究方向:消化内科, E-mail: 173978422@qq.com

Δ 通讯作者:王晓辉(1979-),副主任医师

(收稿日期:2017-08-10 接受日期:2017-08-28)

可有黑便与呕血。胃是消化管最膨大的部分,上接食管,下连十二指肠。胃液中的胃酸和胃蛋白酶分别是由胃底(体)腺的壁细胞和主细胞所分泌的,胃底腺的分布约占全胃的 4/5,而且以胃体部为主,溃疡的发生与胃酸有关^[1]。患者若得不到及时有效的治疗,容易进一步导致胃穿孔、胃出血等严重并发症^[2]。目前,临床治疗胃溃疡的主要以抑酸治疗为原则,通常采用质子泵抑制剂进行临床治疗。本研究为探究不同质子泵抑制药物对活动期胃溃疡的临床治疗效果差异,选取 2016 年 1 月至 2017 年 1 月我院收治的活动期胃溃疡患者 88 例进行了如下比较研究。

1 资料和方法

1.1 临床资料

研究对象共计 88 例,均来自我院消化内科 2016 年 1 月至 2017 年 1 月收治的活动期胃溃疡患者。患者年龄 27~68 岁,平均年龄(39.75± 9.43)岁,病程 8 个月~10 年,平均病程(1.92± 0.67)年,患者中男性 55 例,女性 33 例,患者溃疡数量 1~2 个,平均溃疡数量(1.01± 0.45)个,溃疡面积 2~12 mm²,平均溃疡面积(8.23± 1.98)mm²。纳入标准:(1)年龄大于 25 岁;(2)均签署了知情同意书;(3)均符合活动期胃溃疡的临床诊断标准。排除标准:(1)年龄大于 68 岁;(2)癌症患者;(3)胃穿孔患者;(4)幽门梗阻患者。将所有患者随机分成研究组和对照组,每组各 44 例,两组基线资料比较差异无统计学意义(P>0.05),具有可比性。

1.2 治疗方法

1.2.1 对照组 本组患者给予奥美拉唑(石家庄制药四厂,批号 20161102)于睡前口服治疗,一次 20 mg,每日 1 次。7 d 为一个疗程,连续治疗 8 个疗程。

1.2.2 研究组 本组患者给予兰索拉唑(石家庄制药四厂,批号 20161011)于睡前口服治疗,一次 30 mg,每日 1 次。7 d 为一个疗程,连续治疗 8 个疗程。

1.3 观察指标

以患者的临床总有效率和血清抗氧化因子水平为观察指标。临床疗效判定标准为:(1)痊愈:患者溃疡面完全愈合,炎症症状完全消失;(2)显效:患者溃疡面显著缩小,炎症症状显著改善;(3)有效:患者溃疡面大于 50%,炎症症状有所改善;(4)无效:患者溃疡面积小于 50%,炎症症状未改善或加重。

1.4 统计学方法

数据处理均采用 SPSS.17.0,计量资料的比较采用 t 检验,计数资料的比较采用 χ^2 检验,以 P<0.05 为差异具有统计学意义。

2 结果

2.1 两组患者临床疗效的比较

研究组 44 例患者中,总有效患者 43 例,治疗总有效率为 97.73%;对照组 44 例患者中,总有效患者 35 例,治疗总有效率为 79.55%。研究组临床总有效率显著高于对照组,差异有统计学意义(P<0.05),见表 1。

表 1 两组患者临床疗效的比较

Table 1 Comparison of the clinical effect between the two groups

Groups	n	Cured	Excellent	Effective	Invalid	Total effective rate
Study group	44	23	15	5	1	43, 97.73
Control group	44	15	14	6	9	35, 79.55
P	--		--			0.0072

2.2 两组患者治疗前后血清抗氧化因子水平的比较

治疗前,两组患者血清 SOD、MDA、ET-1 和 NO 水平比较差异无统计学意义(P>0.05),研究组患者治疗后血清 MDA、

ET-1 水平均明显低于对照组,血清 SOD、NO 水平均显著高于对照组(P<0.05),见表 2。

表 2 两组患者治疗前后血清抗氧化因子水平的比较

Table 2 Comparison of the serum levels of antioxidant factors between the two groups before and after treatment

Bfore Groups	n	MDA(μ mol/L)		SOD(U/L)		NO(μ mol/L)		ET-1(ng/L)	
		Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment
Study group	44	7.53± 1.11	4.40± 0.82	36.02± 7.34	54.32± 8.11	49.32± 7.44	66.84± 8.41	71.22± 9.11	50.43± 9.23
Control group	44	7.59± 1.09	5.69± 0.91	36.11± 7.29	40.32± 7.92	50.01± 8.11	57.99± 8.01	71.02± 9.14	61.19± 8.93
P	-	0.7987	0.0000	0.9541	0.0000	0.6785	0.0000	0.9184	0.0000

3 讨论

胃溃疡以反复发作的节律性上腹痛为临床特点,常伴有暖气、返酸、灼热、嘈杂等感觉,甚至还有恶心、呕吐、呕血、便血,采用胃镜检查可以清楚看见胃部有圆形、椭圆形溃疡灶。以往治疗胃溃疡多采用手术切除部分胃脏,后来研究显示奥美拉唑等制酸剂治疗消化性溃疡(胃溃疡、十二指肠溃疡)的效果非常

好,使得大部分患者可以免受手术之苦,但部分病情严重的患者仍需手术,尤其是胃溃疡有恶变可能,治疗更应该慎重。胃溃疡属临床常见病和多发病,以上腹部疼痛为主要症状,若不及时予以有效治疗,可引发胃出血、穿孔等严重并发症而危及生命^[1],其发病机制繁杂,目前尚未完全阐明。目前,采用质子泵抑制药物治疗活动期胃溃疡是临床常用有效的方式,其核心在于抑酸治疗^[3-6]。兰索拉唑与奥美拉唑均属于质子泵抑制药物中的

常见类型,在临床治疗活动期胃溃疡的过程中具有一定的疗效,但是二者的治病机理存在一定的差异^[7-11]。

奥美拉唑可以直接作用于患者胃壁细胞的相关组织,可以抑制 H^+-K^+-ATP 酶活化,从而有效的降低 H^+ 向胃内转运的过程和速率,显著提升患者胃酸的 pH 值,最终实现降低患者胃酸,减少溃疡面的形成^[12-15]。与奥美拉唑相比,兰索拉唑不直接作用于患者胃壁细胞的相关组织,而是能够在人体内与相关组织结合分泌活性代谢物^[16-18]。这些活性代谢物能够有效的抑制 H^+-K^+-ATP 酶活化,比奥美拉唑的抑制效果更加良好从而最终显著的改善了患者的临床溃疡情况和相关症状^[19,20]。本次研究结果显示:研究组治疗总有效率为 97.73%,显著高于对照组的 79.55%,提示兰索拉唑治疗活动期胃溃疡的临床效果与奥美拉唑相比优势十分明显。

胃溃疡致病机理中的重要因素之一就是氧自由基。氧自由基在人体内可以加速和促进氧化作用,患者在发生胃黏膜受损的情况下若氧自由基大量释放,则导致溃疡形成加速。患者血清抗氧化因子水平的变化情况可以有效的反应患者胃溃疡的病情。从本次研究的比较数据上分析:治疗前组间比较,两组患者的各项血清抗氧化因子指标水平差异不大,且无统计学意义;治疗后组间比较,研究组患者的各项血清抗氧化因子指标水平均明显优于对照组,且差异有统计学意义。提示:兰索拉唑在改善患者血清抗氧化因子指标方面的优势也较为明显,对于患者致病因素的影响效果显著。

综上所述,兰索拉唑治疗活动期胃溃疡的临床效果明显优于奥美拉唑,可能与其显著提高患者血清 SOD、NO 水平及降低血清 MDA、ET-1 水平有关。

参考文献(References)

- [1] Xiao W, Xu A, Ji H. Advances in Models of Gastric Ulceration [J]. Pharm Clin Res, 2016, 24(2): 145-150
- [2] Sato T, Amano H, Ito Y, et al. Vascular endothelial growth factor receptor 1 signaling facilitates gastric ulcer healing and angiogenesis through the upregulation of epidermal growth factor expression on VEGFR1+CXCR4+ cells recruited from bone marrow[J]. J Gastroenterol, 2014, 49(3): 455-469
- [3] Li X Y. Effect of lansoprazole on serum malondialdehyd, superoxide dismutase and nitric oxide levels in patients with gastric ulcer [J]. J Chin Pract Diagn Ther, 2015, 29(10): 1034-1035
- [4] Karunakaran R, Ira TM, Thammitiyagodage GM, et al. The gastroprotective effect of ethyl acetate fraction of hot water extract of *Trichosanthes cucumerina* Linn and its underlying mechanisms[J]. BMC complementary and alternative medicine, 2017, 17(1): 312
- [5] Zhao K, Chen Y, Fan Q, et al. Effects of positive acceleration on the expression of CGRP-mRNA in gastric mucosa and gastric mucosal blood flow of rats with experimental gastric ulcer[J]. Chin J Gastroenterol Hepatol, 2015, 24(8): 961-965
- [6] De Mattos CC B, De Mattos LC. Histo-blood group carbohydrates as facilitators for infection by *Helicobacter pylori* [J]. Infection, genetics and evolution : journal of molecular epidemiology and evolutionary genetics in infectious diseases, 2017, 53: 167-74
- [7] Take S, Mizuno M, Ishiki K, et al. Seventeen-year effects of eradicating *Helicobacter pylori* on the prevention of gastric cancer in patients with peptic ulcer; a prospective cohort study [J]. Journal of gastroenterology, 2015, 50(6): 638-644
- [8] Noufou O, Anne-Emmanuelle H, Claude WOJ, et al. Biological and phytochemical investigations of extracts from *pterocarpus erinaceus* poir (fabaceae) root barks[J]. African journal of traditional, complementary, and alternative medicines: AJTCAM, 2017, 14(1): 187-195
- [9] Wu H, Zhong M, Zhou D, et al. Prevention, diagnosis and treatment of perioperative complications of bariatric and metabolic surgery [J]. Chinese journal of gastrointestinal surgery, 2017, 20(4): 393-397
- [10] Nykanen T, Peltola E, Kylänpää L, et al. Bleeding gastric and duodenal ulcers: case-control study comparing angioembolization and surgery [J]. Scandinavian journal of gastroenterology, 2017, 52(5): 523-530
- [11] Farzaei M H, Abdollahi M, Rahimi R. Role of dietary polyphenols in the management of peptic ulcer[J]. World journal of gastroenterology, 2015, 21(21): 6499-6517
- [12] Kamal A, Abd Elmoety A A, Hamza Y, et al. Endoscopic Variceal Ligation followed by Argon Plasma Coagulation Against Endoscopic Variceal Ligation Alone: A Randomized Controlled Trial [J]. Journal of Clinical Gastroenterology, 2017, 51(1): 49-55
- [13] Wu C K, Liang C M, Hsu C N, et al. The Role of Adjuvant Acid Suppression on the Outcomes of Bleeding Esophageal Varices after Endoscopic Variceal Ligation[J]. Plos One, 2017, 12(1): e0169884
- [14] Pigott C, Schomaker N, Martinez-Camacho A. Sa1596 Efficacy and Safety of Endoscopic Variceal Ligation (EVL) for Primary and Secondary Prophylaxis of Esophageal Variceal Bleeding in an Under-served Population[J]. Gastroenterology, 2016, 150(4): S337-S338
- [15] Su J K, Choi C W, Kang D H, et al. Emergency endoscopic variceal ligation in cirrhotic patients with blood clots in the stomach but no active bleeding or stigmata increases the risk of rebleeding [J]. Clinical and Molecular Hepatology, 2016, 22(4): 466-476
- [16] V. Jairath, R. Khanna, Zou G Y, et al. Development of interim patient-reported outcome measures for the assessment of ulcerative colitis disease activity in clinical trials [J]. Alimentary Pharmacology & Therapeutics, 2015, 42(10): 1200-1210
- [17] D'Haens G. Systematic review: second-generation vs. conventional corticosteroids for induction of remission in ulcerative colitis [J]. Alimentary Pharmacology & Therapeutics, 2016, 44(10): 1018-1029
- [18] Lam C, Tan W, Leighton M, et al. A mechanistic multicentre, parallel group, randomised placebo-controlled trial of mesalazine for the treatment of IBS with diarrhoea[J]. Gut, 2015, 65(1): 91-99
- [19] Tariq R, Smyrk T, Pardi D S, et al. New-Onset Microscopic Colitis in an Ulcerative Colitis Patient After Fecal Microbiota Transplantation [J]. The American journal of gastroenterology, 2016, 111(5): 751-752
- [20] Skowron K B, Lapin B, Rubin M, et al. Clostridium Difficile Infection in Ulcerative Colitis: Can Alteration of the Gut-associated Microbiome Contribute to Pouch Failure?[J]. Inflammatory bowel diseases, 2016, 22(4): 902-911