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## 幽门螺杆菌根除失败后两种四联方案根除率的疗效对比 \*

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**摘要 目的:** 对比两种不同的四联疗法对幽门螺杆菌根除失败后的根除率,选择可以有效弥补传统三联疗法的幽门螺杆菌根除失败措施的四联疗法。**方法:** 选择 2010 年 8 月到 2012 年 8 月期间在我院住院治疗的幽门螺杆菌根除失败后患者 90 例作为研究对象。随机分为实验组和对照组,实验组的患者采取序贯疗法,对照组的患者采取标准四联疗法。对比两组的根除率以及临床疗效。**结果:** 实验组患者的根除率为 86.7%,对照组患者根除率为 51.0%;实验组患者的临床总有效率为 95.6%,对照组的临床有效率为 77.8%;实验组的不良反应的总发生率为 4.4%,对照组不良反应总发生率为 20.0%。两组比较差异明显,P 均 < 0.05,具有统计学意义。**结论:** 序贯疗法对幽门螺杆菌根除失败后的根除率以及疗效高于标准四联疗法。

**关键词:** 幽门螺杆菌;序贯疗法;标准四联疗法;临床疗效

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## Comparison on Curative Effects of Two Quadruple Therapies on Eradication Rates after *Helicobacter Pylori* Eradication Failure\*

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**ABSTRACT Objective:** To compare the curative effects of two quadruple therapies on eradication rates after *helicobacter pylori* eradication failure and to select a quadruple therapy that make up the failed *helicobacter pylori* eradication with traditional triple therapy.

**Methods:** 90 patients who have failed to eradicate *helicobacter pylori* and received the treatment in our hospital from August 2010 to August 2012 were selected as the research objects, and were randomly divided into the experimental group and the control group. The patients in the experimental group were adopted the sequential therapy, while patients in the control group adopted the standard quadruple therapy. Eradication rates and clinical curative effects of the two groups were compared. **Results:** The eradication rate of patients in the experimental group was 86.7%, while that in the control group was 51.0%; the clinically curative rate of patients in the experimental group was 95.6%, while that in the control group was 77.8%; the occurrence rate of adverse reactions of patients in the experimental group was 4.4%, while that in the control group was 20.0%. The comparison between the two groups was obvious, with P<0.05, which was of statistical significance. **Conclusion:** The eradication rate after *helicobacter pylori* eradication failure and the curative effect of sequential therapy were higher than those of the standard quadruple therapy.

**Key words:** *Helicobacter Pylori*; Sequential Therapy; Standard Quadruple Therapy; Curative Effects

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### 前言

常见慢性肠胃疾病(例如胃炎、胃溃疡和十二指肠溃疡)的致病因素主要是幽门螺杆菌。如果不及时服用抗菌药物,会演变成胃癌以及胃淋巴瘤。临幊上常用的清除幽门螺杆菌的有大环内酯类、硝基咪唑类、β 内酰胺类以及四环素类等<sup>[1-3]</sup>。对于幽门螺杆菌根除失败的患者一般选择常规的三联疗法(两种抗生素联合铋制剂)。但随着抗生素类药物的广泛使用以及不规则使用,造成耐药菌株数量的增加,导致幽门螺杆菌感染的肠胃疾病患者的复发性以及临幊治疗方面出现问题<sup>[4-7]</sup>。我院针对幽

门螺杆菌根除失败后序贯疗法与标准四联疗法的根除率以及临幊疗效对比这一课题展开研究,现将结果报道如下:

### 1 资料与方法

#### 1.1 一般资料

选取 2010 年 8 月到 2012 年 8 月期间在我院住院治疗的幽门螺杆菌感染但清除失败的患者 90 例作为研究对象。其中男性患者 50 例,女性患者 40 例,年龄在 25~56 岁之间,平均年龄为(36.34±9.12)岁。所有患者均属于幽门螺杆菌清除失败,在四联方案治疗前半个月内均没有做过胃部手术,未服

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用过抗生素、铋制剂、PPI 以及 H<sub>2</sub>受体阻滞剂,没有严重的心、肝、肾以及血液类疾病。随机将其分为实验组和对照组,每组 45 例,两组患者在年龄、性别以及疾病方面无明显差异,具有可比性( $P > 0.05$ )。

## 1.2 方法

实验组患者采取序贯疗法,疗程为 10 d,前 5 d 给予 20 mg 奥美拉唑(常州四药制药有限公司)和 1000 mg 阿莫西林(珠海联邦有限制药公司),后 5 d 给予 20 mg 奥美拉唑和 200 mg 左氧氟沙星(江苏恒瑞医药股份有限公司)和 500 mg 克拉霉素(云南永安制药有限公司)。对照组患者采取标准四联疗法,疗程为 7 d,给予 20 mg 奥美拉唑和 220 mg 胶体次枸橼酸铋钾(丽珠集团丽珠制药厂)和 1000 mg 阿莫西林和 500 mg 克拉霉素。

## 1.3 观察指标

观察序贯疗法和标准四联疗法患者的根除率以及临床有效率。临床有效率包括显效、有效和无效。显效:患者疾病症状

消失或者基本消失;有效:患者疾病症状明显减轻或者得到明显改善;无效:患者的疾病症状无改善甚至加重<sup>[8-10]</sup>。患者的幽门螺杆菌根除率通过检测患者体内的幽门螺杆菌的阴性和阳性,呈阴性为根除,呈阳性为根除失败。患者不良反应的观察主要是以随访的方式进行,治疗后每个月随访一次,询问患者是否有不良反应发生。

## 1.4 统计学方法

应用 SPSS 11.5 统计分析软件,组间计数资料采用  $\chi^2$  检验,以  $P < 0.05$  为差异有统计学意义。

## 2 结果

将两组患者的幽门螺杆菌根除失败后的根除率统计如下(见表 1):数据显示,序贯疗法的根除率 86.7% 明显高于标准四联疗法的根除率 51.0%,两组比较差异明显,  $\chi^2=5.79$ ,  $P < 0.05$ ,具有统计学意义。

表 1 两种四联疗法的根除率(n,%)

Table 1 Eradication rate of the two quadruple therapy methods(n,%)

项目 Items	幽门螺杆菌阴性(例) <i>Helicobacter pylori</i> negative (cases)	幽门螺杆菌阳性(例) <i>Helicobacter pylori</i> positive (cases)	根除率(%) Eradication rate (%)
实验组 Test group	39	6	86.7
对照组 Control group	23	22	51.0

## 2.1 两种不同的四联方案治疗后的临床疗效

将两组患者治疗后的临床疗效统计如下(见表 2):数据显示,序贯疗法的临床总有效率为 95.6%,对照组临床总有效率

为 77.8%。两组比较差异明显,  $\chi^2=6.18$ ,  $P < 0.05$ ,具有统计学意义。

表 2(N=45) 两种不同四联疗法的临床疗效(n,%)

Table 2 (N = 45) Clinical effects of two different quadruple therapy methods(n,%)

项目 Items	显效 Significantly effective	有效 Effective	无效 Invalid	总有效率(%) Total effective rate
实验组 Test group	2(4.4)	41(91.2)	2(4.4)	95.6
对照组 Control group	1(2.2)	34(75.6)	10(22.2)	77.8

## 2.2 两种不同的四联方案治疗后的不良反应发生情况

将两组患者不良反应的发生情况统计如下(见表 3):数据显示,实验组的不良反应总发生率为 4.4%,对照组的不良反应

总发生率为 20.0%。两组比较差异明显,  $\chi^2=5.11$ ,  $P < 0.05$ ,具有统计学意义。

表 3 两种不同四联疗法的不良反应(n,%)

Table 3 Incidence of adverse reactions of two different quadruple therapy methods(n,%)

项目 Items	皮疹 Tetter	恶心呕吐 Nausea and vomiting	腹泻 Diarrhea	便秘 Constipation	总发生率 Total effective rate
实验组 Test group	1(2.2)	0(0.0)	1(2.2)	0(0.0)	4.4
对照组 Control group	1(2.2)	3(6.7)	3(6.7)	2(4.4)	20.0

### 3 讨论

根除幽门螺杆菌是治疗消化系统常见疾病的重要手段。近年来我国传统的三联疗法的根除率和临床有效率逐渐下降,治疗方案不规范,抗生素的不规范使用导致患者幽门螺杆菌复发病例增多,患者的依从性差等<sup>[11,12]</sup>。国内外的大部分医学专家认为四联方案能够作为补救措施根除幽门螺杆菌,随后多种四联方案应用于临床<sup>[13-15]</sup>。2007年初芦山的推荐采用四联方案根除幽门螺杆菌,根据张志宏的研究结果报道,一周和两周的四联方案根除率为82.5%和83.3%<sup>[16-18]</sup>。最近,根据意大利的一项研究发现,序贯疗法作为补救措施相比于一般的四联疗法根除幽门螺杆菌的临床效果显著<sup>[19]</sup>。由于序贯疗法的效果报道少见,本院就这一课题进行研究,结果显示序贯疗法的幽门螺杆菌根除率86.7%明显高于标准四联疗法的幽门螺杆菌根除率51.0%;序贯疗法的临床有效率95.6%明显高于标准四联疗法77.8%;序贯疗法的不良反应发生率4.4%明显低于标准四联疗法的不良反应发生率20.0%。标准四联疗法方案中根除幽门螺杆菌失败的主要原因是抗生素药物的耐药性,序贯疗法中的左氧氟沙星是新型的喹诺酮类抗生素,对克拉霉素和阿莫西林产生耐药性的患者对左氧氟沙星仍然敏感,从很大程度上提高了根除率以及临床有效率。阿莫西林可以降低患者对克拉霉素的耐药性,主要通过形成克拉霉素排除通道,将药物快速排出体外。同时阿莫西林可以破坏幽门螺杆菌的细胞壁,达到清除幽门螺杆菌的目的。

#### 参考文献(References)

- [1] 闵国清, 谢丹, 黄艳辉, 等. 四联根除幽门螺杆菌补救疗法对照分析[J]. 中华消化病与影像杂志(电子版), 2012, 2(4): 262-265  
Min Guo-qing, Xie Dan, Huang Yan-hui, et al. Quadruple therapy eradication of helicobacter pylori remedial treatment comparison analysis[J]. Chinese digestive disease and video magazine (electronic version), 2012, 2(4): 262-265
- [2] 朱传会, 李庭赞, 陈志坦, 等. 对幽门螺杆菌根除失败后补救治疗方案的临床研究[J]. 中华临床医师杂志(电子版), 2012, 6(14): 3986-3989  
Zhu Chuan-hui, Li Ting-zan, Chen Zhi-tan, et al. After helicobacter pylori eradication failure to remedy treatment clinical research [J]. Chinese journal of clinical physicians (electronic), 2012, 6(14): 3986-3989
- [3] 何永红, 陈伟峰, 刘霞, 等. 序贯疗法与标准四联疗法对幽门螺杆菌根除失败后补救治疗的疗效分析[J]. 胃肠病学, 2012, 17(8): 477-479  
He Yong-hong, Chen Wei-feng, Liu Xia, et al. Sequential therapy with standard quadruple therapy on the therapeutic effect of remedy after helicobacter pylori eradication failure analysis [J]. Gastroenterology, 2012, 17(8): 477-479
- [4] 胡水清, 张玫. 10日序贯疗法治疗幽门螺杆菌感染39例[J]. 世界华人消化杂志, 2009, 17(16): 1693-1695  
Hu Shui-qing, Zhang Mei. The 10-day sequential therapy for helicobacter pylori infection 39 cases [J]. Journal of world Chinese digest magazine, 2009, (16): 1693-1695
- [5] Vaira D, Zullo A, Vakil N, et al. Sequential therapy versus standard triple-drug therapy for Helicobacter pylorieradication:a randomized trial[J]. Ann Intern Med, 2007, 146(8): 556-563
- [6] 中华医学会消化病学分会, 幽门螺杆菌学组 / 幽门螺杆菌科研协作组. 第三次全国幽门螺杆菌感染若干问题共识报告[J]. 胃肠病学, 2008, 13(1): 42-46  
Digestive epidemiology branch of Chinese medical association, the helicobacter pylori group/h. pylori research collaboration. Some problems of helicobacter pylori infection in the third nation al consensus report[J]. Gastroenterology, 2008, 13(1): 42-46
- [7] 张国玲. 幽门螺杆菌根除失败后含四环素四联二线方案的疗效观察[J]. 中国医药指南, 2012, 10(7): 154-155  
Zhang Guo-ling. After helicobacter pylori eradication failure containing tetracycline quadruple curative effect observation of the second line[J]. China medical guide, 2012, 10 (7): 154-155
- [8] Ripamonti C, Bruera E. Palliative management of malignant bowel obstruction[J]. Int J Cancer, 2010, 12(2): 135
- [9] 陈婉珺, 陈婉, 郑青, 等. 评估以泮托拉唑为基础的三联和四联疗法根除幽门螺杆菌的疗效[J]. 中华消化杂志, 2011, 31(1): 40-44  
Chen Wan-jun, Chen Wan, Zheng Qing, et al. Assessment in pantotriptazone based the curative effect of helicobacter pylori eradication triple and quadruple therapy [J]. Chinese digest magazine, 2011, 31 (1): 40-44
- [10] 杨杰, 吕锐, 李丽滨, 等. 锰剂四联方案根除幽门螺杆菌的比较研究[J]. 临床消化病杂志, 2010, 22(5): 277-278+281  
Yang Jie, Lv Rui, Li Li-bin, et al. Bismuth agent quadruple scheme of helicobacter pylori eradication comparative study [J]. Journal of clinical digestive diseases, 2010, 22(5): 277-278+281
- [11] 张喜梅, 张振玉. 左氧氟沙星联合雷贝拉唑及果胶铋治疗幽门螺杆菌的疗效[J]. 世界华人消化杂志, 2010, 18(18): 1951-1953  
Zhang Xi-mei, Zhang Zhen-yu. Levofloxacin combined ray and pectic bismuth (helicobacter pylori) treatment the curative effect of [J]. Journal of world Chinese digest magazine, 2010, 19(18): 1951-1953
- [12] 兰佑乾, 俞力军. 含莫西沙星的三联方案补救根除幽门螺杆菌的系统评价[J]. 临床内科杂志, 2010, 27(12): 830-832  
Lan You-qian, Yu Li-jun. Sanlian solution containing moxifloxacin remedy system evaluation [J]. Journal of helicobacter pylori eradication of clinical medical journal, 2010, 27(12): 830-832
- [13] 张志宏, 漆跃林, 韦艳丽, 等. 不同疗程的四联方案在幽门螺杆菌根除失败的补救治疗中的疗效观察[J]. 临床内科杂志, 2011, 28(2): 137-138  
Zhang Zhi-hong, Qi Yue-lin, Wei Yan-li, et al. Different courses of quadruple scheme in the remedial treatment of effect of the treatment of helicobacter pylori eradication failure [J]. Journal of clinical medical journal, 2011, 28 (2): 137-138
- [14] 高文, 成虹, 胡伏莲, 等. 含艾普拉唑四联七天疗法根除幽门螺杆菌的全国多中心临床研究[J]. 中华医学杂志, 2012, 92(30): 2108-2112  
Gao Wen, Cheng Hong, Hu Fu-lian, et al. Including moxa oprah azole quadruple therapy of helicobacter pylori eradication for seven days national multicenter clinical study [J]. Chinese journal of medicine, 2012, 95(30): 2108-2112
- [15] 周文斌, 李志英. 含雷贝拉唑四联初治方案根除幽门螺杆菌疗效观察[J]. 中国当代医药, 2011, 18(2): 45

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- [12] Lv CM. Treatment of recurrent ovarian cancer [J]. Jiang su Medical Journal, 2011, 20(09): 1083-1084
- [13] Pawlik A, Nowak JM, Grzanka D, et al. Hyperthermia induces cytoskeletal alterations and mitotic catastrophe in p53-deficient H1299 lung cancer cells[J]. Acta Histochemica, 2013, 115(1): 8-15
- [14] Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based chemotherapy versus conventional platinum-based chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2 trial[J]. Lancet, 2006, 361(9375): 2099
- [15] Han C, Schiffner DC, Schultheiss TE, et al. Residual setup errors and dose variations with less-than-daily image guided patient setup in external beam radiotherapy for esophageal cancer [J]. Radiother Oncol, 2012, 102(2): 309-314
- [16] Wang JH, Lu XJ, Zhou J, et al. A randomized controlled trial of conventional fraction and late course accelerated hyperfraction three-dimensional conformal radiotherapy for esophageal cancer [J]. Cell Bio-chem Bio phys, 2012, 62(1): 107-112
- [17] Ito A, Shinkai M, Honda H, et al. Heat shock protein 70 expression induces antitumor immunity during intracellular hyperthermia using magnetite nanoparticles [J]. Cancer Immunol Immunother, 2003, 52(2): 80-88
- [18] Rong Y, Mack P. Apoptosis induced by hyperthermia in Dunn osseosarcoma cell line in vitro[J]. Int J Hyperthermia, 2000, 16(1): 19-27
- [19] Nikfarjam M, Muralidharan V, Malcontenti-Wilson C, et al. The apoptotic response of liver and colorectal liver metastases to focal hyperthermic injury[J]. Anticancer Res, 2005, 25(2B): 1413-1419
- [20] Frey B, Weiss EM, Rubner Y, et al. Old and new facts about hyperthermia-induced modulations of the immune system [J]. J Hyperthermia, 2012, 28(6): 528-542

(上接第 480 页)

- Zhou Wen-bin, Li Zhi-ying. With rabeprazole azole quadruple solution treated first clinical observation on the eradication of helicobacter pylori [J]. Journal of contemporary Chinese medicine, 2011, 18(2): 45
- [16] 胡伏莲, 成虹, 张学智, 等. 多中心临床观察荆花胃康联合三联疗法治疗幽门螺杆菌相关性十二指肠溃疡和胃炎疗效及耐药分析 [J]. 中华医学杂志, 2012, 92(10): 679-684
- Hu Fu-lian, Cheng Hong, Zhang Xue-zhi , et al. Multi-center clinical observation JingHua stomach kang combined triple therapy in the treatment of helicobacter pylori correlation between duodenal ulcer and gastritis curative effect and drug resistance analysis [J]. Chinese journal of medicine, 2012, 95(10): 679-684
- [17] 祝志太, 吴细明, 刘国良, 等. 含呋喃唑酮的四联 10 天疗法用于初次幽门螺杆菌治疗的临床观察 [J]. 中国现代医生, 2012, 50(2):143-144

- Zhu Zhi-tai, Wu Xi-ming, Liu Guo-liang, et al. With furazolidone quadruple therapy for helicobacter pylori treatment first 10 days of clinical observation[J]. Chinese modern doctors, 2012, 50(2): 143-144
- [18] 姚红霞, 李艳君.泮托拉唑三联 7d 疗法与四联 5d 疗法治疗幽门螺杆菌感染的对照研究[J].中国医学创新, 2011, 08(32): 62-63
- Yao Hong-xia, Li Yan-jun. Panxi tora azole triple therapy and 7d quad 5d therapy treatment of helicobacter pylori infection control study[J]. China medical innovation, preceding, 2011, 08(32): 62-63
- [19] 高文, 胡伏莲, 王晓敏, 等.含呋喃唑酮的四联疗法联合口腔洁治对幽门螺杆菌根除多次失败的补救治疗 [J]. 中华医学杂志, 2011, 91(12): 836-839
- Gao Wen, Hu Fu-lian , Wang Xiao-min, et al. Including furazolidone quadruple therapy in combination with oral clean governance on the remedial treatment of helicobacter pylori eradication failure many times[J]. Chinese journal of medicine, 2011, 91(12): 836-839