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# 奥美拉唑联合克拉霉素、阿莫西林对老年消化性溃疡患者胃泌素水平与外周血红细胞免疫功能的影响 \*

朴仁女<sup>1</sup> 赵冬<sup>1△</sup> 阚亮<sup>2</sup> 汪磊<sup>1</sup> 郑美玲<sup>1</sup>

(1 辽宁省金秋医院 老年医学科二病房 辽宁沈阳 110016; 2 中国医科大学附属盛京医院干部诊疗科 辽宁沈阳 110004)

**摘要目的:**探讨奥美拉唑联合克拉霉素、阿莫西林对老年消化性溃疡患者胃泌素水平与外周血红细胞免疫功能的影响。**方法:**收集我院就诊的100例消化性溃疡患者,随机分为实验组和对照组,每组50例。对照组患者给予奥美拉唑肠溶片治疗;实验组患者给予奥美拉唑肠溶片、克拉霉素及阿莫西林胶囊治疗。观察并比较两组患者治疗前后胃泌素(Gastrin)、红细胞免疫功能(RBC-C3b、RBC-ICRRR)水平、临床疗效及不良反应。**结果:**与治疗前相比,两组患者治疗后胃泌素、RBC-ICRRR水平均下降,RBC-C3b水平均升高,差异具有统计学意义( $P<0.05$ );与对照组相比,实验组患者治疗后胃泌素、RBC-ICRRR水平较低,RBC-C3b水平较高,差异具有统计学意义( $P<0.05$ );实验组患者治疗总有效率高于对照组,差异具有统计学意义( $P<0.05$ );两组患者不良反应发生率相比,差异无统计学意义( $P>0.05$ )。**结论:**奥美拉唑联合克拉霉素、阿莫西林能够降低老年消化性溃疡患者胃泌素水平,改善红细胞免疫功能,临床疗效较好。

**关键词:**奥美拉唑;阿莫西林;克拉霉素;消化性溃疡

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## Effect of Omeprazole Combined with Clarithromycin and Amoxicillin on Gastrin Levels and Peripheral Blood Red Cell Immune Function of Elderly Patients with Peptic Ulcer\*

PIAO Ren-nv<sup>1</sup>, ZHAO Dong<sup>1△</sup>, KAN Liang<sup>2</sup>, WANG Lei<sup>1</sup>, ZHENG Mei-ling<sup>1</sup>

(1 Second geriatric ward, Department of Geriatrics, Liaoning Jinqiu Hospital, Shenyang, Liaoning, 110016, China;

(2 Shengjing Hospital affiliated to China Medical University, Cadre clinic, Shenyang, Liaoning, 110004, China)

**ABSTRACT Objective:** To explore the effect of omeprazole combined with clarithromycin and amoxicillin on gastrin levels and the peripheral blood red cell immune function of elderly patients with peptic ulcer. **Methods:** 100 cases of peptic ulcer in our hospital were randomly divided into the experimental group and the control group, with 50 cases in each group. The patients in the control group were treated with omeprazole enteric, while the patients in the experimental group were treated with the omeprazole enteric, clarithromycin and amoxicillin. Then the levels of gastrin, RBC-C3b and RBC-ICRRR and the clinical curative effect and adverse reactions in the two groups were observed and compared before and after the treatment. **Results:** Compared with before treatment, the levels of gastrin and RBC-ICRRR in the two groups decreased after the treatment, and the levels of RBC-C3b increased, and the differences were statistically significant ( $P<0.05$ ); Compared with the control group, the levels of gastrin and RBC-ICRRR in the experimental group were lower, and the level of RBC-C3b was higher, and the differences were statistically significant ( $P<0.05$ ); The total clinical efficacy in the experimental group was higher than that of the control group, and the difference was statistically significant ( $P<0.05$ ). There was no statistically significant difference about the adverse reactions between the two groups ( $P>0.05$ ). **Conclusion:** The combination of the omeprazole, clarithromycin and amoxicillin has better effects on the treatment of peptic ulcer, which can reduce the levels of gastrin and RBC-ICRRR, as well as increase the levels of RBC-C3b.

**Key words:** Omeprazole; Amoxicillin; Clarithromycin; Peptic ulcer

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### 前言

消化性溃疡包括胃溃疡和十二指肠溃疡,其发病与患者消化系统局部的粘膜损伤以及保护之间的失调关系密切<sup>[1]</sup>。消化

性溃疡以上腹部疼痛、吐酸、恶心、呕吐等为主要临床症状,如不及时治疗,会并发穿孔、消化道出血、幽门梗阻等,严重的还会发生癌变<sup>[2]</sup>。临床常用的抑酸、保护胃粘膜、抗幽门螺杆菌治疗和抗为主,临床疗效较好<sup>[3]</sup>。老年人的胃粘膜保护机制变弱,

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作者简介:朴仁女(1974-),女,副主任医师,硕士,研究方向:老年消化病方面,电话:17740077108

△ 通讯作者:赵冬(1962-),女,主任医师,本科,研究方向:老年消化病的临床诊治等

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胃的蠕动功能减弱,加之基础疾病增加,导致消化溃疡的发病率较高,且并发症较多,难以治愈<sup>[4]</sup>。奥美拉唑联合阿莫西林、克拉霉素是治疗消化性溃疡较为常用的疗法之一<sup>[5]</sup>。本实验采用奥美拉唑联合克拉霉素、阿莫西林,通过观察胃泌素以及红细胞免疫功能水平,探讨其对老年消化性溃疡的治疗作用,现报道如下。

## 1 资料与方法

### 1.1 临床资料

收集2015年3月~2016年3月于我院就诊的100例消化性溃疡患者,随机分两组,每组50例。实验组组内男性26例,女性24例,患者平均年龄(66.36±0.79)岁;对照组内男性27例,女性23例,患者平均年龄(66.19±0.81)岁。所有患者均符合中关于消化性溃疡的诊断标准;患者均无幽门梗阻、穿孔以及消化道出血等疾病;均无心脑血管疾病;患者治疗前未使用过实验相关药物;无造血系统严重疾病;两组患者一般资料相比有可比性(P>0.05)。

### 1.2 方法

对照组患者给予奥美拉唑肠溶片(国药准字H20010787青岛双鲸药业有限公司)20 mg/次,2次/d,口服;实验组患者给予奥美拉唑联合阿莫西林、克拉霉素联合治疗:奥美拉唑肠溶片(国药准字H20010787青岛双鲸药业有限公司)20 mg/次,1次/d,克拉霉素(国药准字H12020488云南永安制药有限公司)500 mg/次,2次/d,阿莫西林胶囊(批准文号:国药准字

H20073235吉林显峰科技制药有限公司)1000 mg/次,1次/d,饭前口服,治疗均连续4周。记录患者恶心、呕吐、头晕、食欲减退、便秘等不良反应。

### 1.3 检测指标

治疗前后取所有患者的外周静脉血3 mL,离心取上清,采用放射免疫法,检测患者胃泌素(Gastrin)水平。采用酵母花环法,检测患者RBC-C3bRR和RBC-ICRRR水平。

### 1.4 疗效评价

治疗后对患者的临床疗效根据《中药新药临床研究指导原则》进行评价:患者临床症状消失,溃疡创面消失或已形成瘢痕为治愈;患者临床症状改善,溃疡创面减少大于50%,或已经进入愈合期与有效;患者临床症状无明显改善,经胃镜检查,患者溃疡创面未减少甚至扩大为无效。

### 1.5 统计学分析

计量数据采用t检验,均数±标准差(̄x±s)表示,计数资料采用卡方检验,%表示。采用SPSS 19.0统计软件,以P<0.05认为差异有统计学意义。

## 2 结果

### 2.1 两组患者治疗前后胃泌素水平比较

治疗后,与治疗前相比两组患者胃泌素水平均下降(P<0.05),实验组患者胃泌素水平与对照组相比较低(P<0.05),见表1。

表1 患者治疗前后胃泌素水平比较(pg/ml,̄x±s)

Table 1 Comparison of the serum gastrin levels between two groups before and after treatment(pg/ml,̄x±s)

Groups	Before treatment	After treatment
Experimental group	155.28±23.18	78.91±13.01**
Control group	158.91±31.05	91.23±10.95*

Note: Compared with before treatment, \*P<0.05; Compared with the control group after treatment, \*\*P<0.05.

### 2.2 两组患者红细胞免疫功能比较

治疗后,两组患者的RBC-C3b水平平均升高,RBC-ICRR

水平均下降(P<0.05);与对照组相比,实验组患者RBC-C3b水平较高,RBC-ICRRR水平较低(P<0.05),见表2。

表2 患者治疗前后RBC-C3bRR、RBC-ICRRR水平比较(% ,̄x±s)

Table 2 Comparison of the serum RBC-C3bRR and RBC-ICRRR levels between two groups before and after treatment(% ,̄x±s)

Groups		RBC-C3bRR	RBC-ICRRR
Experimental group	Before treatment	5.88±1.02	15.34±2.93
	After treatment	11.02±2.12**	6.29±1.02**
Control group	Before treatment	5.79±0.99	14.03±2.16
	After treatment	8.23±1.48*	10.37±2.19*

Note: Compared with before treatment, \*P<0.05; Compared with the control group after treatment, \*\*P<0.05.

### 2.3 临床疗效比较

治疗后,实验组的治疗总有效率与对照组相比较高(P<0.05),见表3。

### 2.4 不良反应情况

对照组患者中出现恶心2例,呕吐1例,头晕1例,食欲减

退1例;治疗组患者中出现恶心、头晕、便秘、食欲减退各1例,患者不良反应给予相应治疗后均好转,未影响实验。对照组和实验组不良反应发生率分别为10%和8%,不良反应发生率无明显差异(P>0.05)。

## 3 讨论

表 3 患者临床疗效比较(%， $\bar{x} \pm s$ )Table 3 Comparison of the clinical curative effect in two groups(%， $\bar{x} \pm s$ )

Groups	Recovered	Effective	Invalid	Total effective rate
Experimental group	37(74.0)	11(22.0)	2(4.0)	48(96.0)*
Control group	25(50.0)	13(26.0)	12(24.0)	38(76.0)

Note: Compared with the control group, \*P&lt;0.05.

消化性溃疡在临床易反复发作,若失于治疗,可导致消化道出血、穿孔等较为严重的并发症甚至造成癌变<sup>[6]</sup>。幽门螺杆菌感染、胃酸过度分泌、遗传、药物、环境等因素都与消化性溃疡的发病关系密切<sup>[7]</sup>。研究已证实,质子泵抑制剂联合抗生素是消化性溃疡较为有效的治疗方案<sup>[8,9]</sup>。阿莫西林属于青霉素类药物,具有抗菌作用,细胞穿透力较强,能够抑制幽门螺杆菌的细胞壁合成,能够切断建造细胞壁的途径,促使其破裂溶解,抑制局部粘膜的炎症反应;同时,阿莫西林能够增加胃和十二指肠粘膜血流量,具有粘膜修复作用,改善炎症症状<sup>[10,11]</sup>。奥美拉唑是质子泵抑制剂,能够作用于壁细胞,转化为次磺酸和亚磺酰胺,抑制胃酸分泌<sup>[12]</sup>。同时还能在发挥抑酸作用的同时,增加抗生素的浓度,改善患者体内的白细胞功能、减轻胃粘膜炎症,根除幽门螺杆菌<sup>[13]</sup>。克拉霉素为大环内酯类抗生素,经口服就达到较高的血药浓度,从而达到抗炎的作用<sup>[14]</sup>。我们的研究表明,采用三种药物联合治疗的临床有效率较高,说明奥美拉唑联合阿莫西林、克拉霉素治疗消化性溃疡的临床疗效较好。

胃泌素(Gastrin)是一种激素,由胃肠黏膜中的G细胞所分泌,对壁细胞盐酸的分泌具有促进作用<sup>[15]</sup>。有研究表明<sup>[16]</sup>,消化性溃疡患者幽门螺杆菌感染后,可以导致血清胃泌素的水平明显升高。消化性溃疡患者存在幽门螺杆菌的感染,幽门螺杆菌在体内的代谢过程中产生尿素,中和胃酸,对消化道中的G、D细胞均会产生影响,生长抑素的合成不足,造成对胃泌素分泌的抑制不足,此外,胃肠经幽门螺杆菌感染后,产生炎症刺激,细胞因子如白介素、肿瘤坏死因子等造成胃肠激素的分泌异常,胃泌素水平升高<sup>[17]</sup>。我们的实验结果表明,治疗后,两组患者的胃泌素水平均下降,实验组患者的胃泌素水平较低,结果说明奥美拉唑联合阿莫西林、克拉霉素能够改善粘膜的炎症情况,修复胃肠神经内分泌细胞,使胃泌素的分泌水平达到正常。

红细胞除具有运输氧气、二氧化碳,调节呼吸功能以外,在对于免疫功能的调节方面也具有一定的作用<sup>[18]</sup>。红细胞表面的免疫相关分子,具有参与免疫应答、浓缩抗原、清除免疫复合物、促进吞噬细胞以及自然杀伤细胞功能等作用。红细胞细胞膜上的补体C3b是其最重要的免疫物质之一,红细胞与免疫复合物的结合率相当于白细胞的数百倍,因此,红细胞在清除免疫复合物中发挥重要作用<sup>[19]</sup>。RBC-C3bRR、RBC-ICRRR是反映红细胞天然免疫的重要指标,C3b受体,黏附于抗原-抗体-补体复合物,清除免疫复合物。因此当机体遭受外来异物侵袭时,补体C3b受体发挥免疫黏附作用对抗原产生识别、提呈以及清除作用<sup>[20]</sup>。我们的实验结果表明,治疗后两组患者RBC-C3bRR水平均升高,RBC-ICRRR水平均下降,实验组患者的RBC-C3bRR水平较高,RBC-ICRRR水平较低。说明奥美拉唑联合克拉霉素、阿莫西林能够提高患者红细胞补体C3b受体水平,同时降低RBC-ICRRR水平,从而增加免疫复合物的清除

率。

综上,奥美拉唑联合克拉霉素、阿莫西林治疗消化性溃疡的效果显著,能够降低老年消化性溃疡患者胃泌素水平,改善红细胞免疫功能,临床疗效较好,在下一步我们将对本实验得出的结论进行更加深入的探讨和论证。

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