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## 老年上消化道出血发病因素及与 HP 感染相关性分析 \*

邹 燕<sup>1</sup> 黄 忠<sup>1</sup> 侯 聪<sup>1</sup> 李 智<sup>1</sup> 王 兰<sup>1</sup> 张 燕<sup>2</sup>

(1 四川省自贡市第一人民医院 四川 自贡 643000;2 四川大学华西医院 四川 成都 650000)

**摘要 目的:**研究老年上消化道出血发病因素及与 HP 感染的相关性。**方法:**选取我院以消化性溃疡为诊断而收入院患者 300 例,进行钡餐及胃镜检查,其中合并出血者 125 例,未合并出血者 175 例,对照组选用同时期出现消化道疾病且经胃镜检查排除消化性溃疡者 310 例。检测所有患者 HP 感染的情况和服用非甾体类抗炎(NSAIDs)药物的情况,根据是否服药及服用时间的长短分为 ABCD 组。测定消化性溃疡组与对照组中暴露人数与非暴露人数的比值即 OR 值,并进行统计学分析。**结果:**①发生消化性溃疡的 OR 值,HP 合并 NSAIDs 组为 20.31,明显高于 HP 组和 NSAIDs 组,且大于两者之和,差异有统计学意义( $P < 0.05$ );②消化性溃疡合并出血与服用 NSAIDs 药物时间的关系显示,B 组的 OR 值为 3.79,C 组的 OR 值为 7.88,D 组的 OR 值为 10.41,B 组<C 组<D 组,差异有统计学意义( $P < 0.05$ );③发生消化性溃疡合并出血的 OR 值,HP 合并 NSAIDs 组为 13.31,明显高于 HP 组的 1.12 和 NSAIDs 组的 1.54,且大于两者之和,差异有统计学意义( $P < 0.05$ )。**结论:**老年上消化道出血的发病主要与消化性溃疡有关,HP 感染与服用 NSAIDs 药物在发病过程中具有协同作用。

**关键词:**老年上消化道出血;发病因素;HP 感染;相关性

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## Pathological Factors in Elderly Upper Gastrointestinal Hemorrhage and Its Correlation with HP Infections\*

ZOU Yan<sup>1</sup>, HUANG Zhong<sup>1</sup>, HOU Cong<sup>1</sup>, LI Zhi, WANG Lan<sup>1</sup>, ZHANG Yan<sup>2</sup>

(1 Department of Gastroenterology, Sichuan Province, Zigong First People's Hospital, Zigong, Sichuan, 643000, China;

2 West China Hospital of Sichuan University, Chengdu, Sichuan, 650000, China)

**ABSTRACT Objective:** To study the risk factors in elderly upper gastrointestinal bleeding and the correlation with HP infection.  
**Methods:** 300 cases of peptic ulcer patients diagnosed by barium meal, and gastroscopy in our hospital were selected as objects, which included 125 cases that combined with hemorrhage, and 175 cases without hemorrhage. And 310 cases exclusive of peptic ulcer in the same period by endoscopy were considered as control group. HP infection and use of non steroidal anti-inflammatory drugs (NSAIDs) were detected and carried on statistics analysis. **Results:** ① The OR value of incidence of peptic ulcer in HP combined with NSAIDs group was 20.31, obviously higher than that of HP group 6.97 and NSAIDs group 6.73, and more than the sum of the two, the difference was statistically significant ( $P < 0.05$ ); ② for the relationship between peptic ulcer combined with hemorrhage and NSAIDs drug dose and time, the results showed the OR value in B group was 3.79, and 7.88 in C group, 10.41 in D group, group B<group C<group D, the difference was statistically significant ( $P < 0.05$ ); ③ for the occurrence of peptic ulcer combined with hemorrhage, the OR value in HP combined with NSAIDs group was 13.31, significantly higher than that of group HP 1.12 and group NSAIDs 1.54, and more than the sum of the two, the difference was statistically significant ( $P < 0.05$ ). **Conclusions:** The occurrence of elderly upper gastrointestinal hemorrhage is mainly associated with peptic ulcer, and the infection of HP and taking NSAIDs drugs, have synergistic effect in the course of disease.

**Key words:** Elderly upper gastrointestinal bleeding; Risk factors; HP infection; Correlation

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### 前言

上消化道出血是由于消化性溃疡、胃粘膜损伤、食管胃底静脉曲张破裂以及胃癌等原因引起的一种出血性疾病,通常发生在屈氏韧带以上<sup>[1]</sup>。本病临床表现为呕血和黑便,严重大量出血可出现氮质血症、贫血、发热、失血性休克等危急症状<sup>[2]</sup>。本病多发于老年人群,属于老年人常见的急危重症。据调查统计<sup>[3]</sup>,

由于老年人本身的生理特点及血管条件,其死亡率可达 30%~50%,严重危害老年人的生命健康。资料显示<sup>[4]</sup>,本病最常见的病因是消化性溃疡,多与幽门螺旋杆菌(HP)感染以及非甾体类抗炎(NSAIDs)药物的服用有关。随着现代药理学的发展,人们更加重视疾病防治及预后,NSAIDs 药物以其抗血小板聚集、预防消化道肿瘤等作用<sup>[5]</sup>,越来越广泛的应用于老年人的心脑血管、肿瘤等疾病的预防中,但其胃肠道的副作用也不容忽视;

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作者简介:邹燕,女,本科,主治医师,主要研究方向:老年上消化道疾病治疗

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同时,老年人更易感染 HP<sup>[6]</sup>,导致消化性溃疡合并出血。但是,关于服用 NSAIDs 药物与 HP 感染在消化性溃疡合并出血中作用的相关性,目前尚不明确。为了指导临床用药,增强疗效,改善其预后,我们通过观察 NSAIDs 对消化性溃疡合并出血的比值(OR),探究老年上消化道出血发病因素及与 HP 感染的相关性。

## 1 资料与方法

### 1.1 一般资料

选取 2010 年 1 月至 2014 年 1 月于我院以消化性溃疡为诊断而收入院患者 300 例,其中男 173 例,女 127 例,年龄 60-75 岁,平均年龄  $69.2 \pm 7.4$  岁。对患者进行钡餐及胃镜检查,其中合并出血者 125 例,男 68 例,女 57 例,平均年龄  $68.3 \pm 6.7$  岁;未合并出血者 175 例,男 99 例,女 76 例,平均年龄  $70.1 \pm 5.2$  岁;对照组选用相同时期出现消化道疾病且经胃镜检查排除消化性溃疡者 310 例,男 180 例,女 130 例,年龄 61-78 岁,平均年龄  $70.3 \pm 5.7$  岁。两组患者的一般资料相仿,差异无统计学意义( $P > 0.05$ )。患者自愿参与本实验,并签署知情同意书。方案获得我院伦理委员会批准并全过程跟踪。

### 1.2 纳入标准

存在消化道症状;合并出血患者入组前 2 天内有呕血或黑便现象;消化性溃疡及溃疡合并上消化道出血患者均经胃镜证实<sup>[7]</sup>;年龄在 60-80 岁之间。

### 1.3 排除标准

诊断为复合性、恶性溃疡;心脑血管、肝、胆严重疾病;恶性

肿瘤;血液系统疾病;神志异常;入组前经过抑酸、抗炎治疗;由于各种原因不能完成实验的患者。

### 1.4 观察指标及方法

**1.4.1 服用 NSAIDs 药物情况** 调查统计患者服用 NSAIDs 药物的情况,并根据服用时间的长短分组。未服用 NSAIDs 药物的患者列为 A 组;时间小于 1 周,未连续服药的患者列为 B 组;连续服药,时间  $\leq 1$  个月的患者列为 C 组;连续服药,时间  $> 1$  个月的患者列为 D 组。

**1.4.2 HP 感染的检测** 分别抽取患者的空腹静脉血 5 mL,采用酶联合吸附测定(ELISA)检测血清中 HP 抗体<sup>[8]</sup>,同时利用呼气试验<sup>[9]</sup>检测尿素酶,以确定患者是否感染 HP。

**1.4.3 OR 值的测定** 测定消化性溃疡组中暴露人数与非暴露人数的比值除以对照组中暴露人数与非暴露人数的比值为 OR 值。

### 1.5 统计学方法

采用统计学软件 SPSS19.0 进行统计学分析,计量资料采用 t 检验,计数资料采用卡方检验处理,以  $P < 0.05$  为差异显著,有统计学意义。计算 OR 值,可信区间(CI)取 95%<sup>[10]</sup>,评估各发病因素对消化性溃疡合并出血的影响程度。

## 2 结果

### 2.1 消化性溃疡的发生与服用 NSAIDs 药物和 HP 感染的关系

发生消化性溃疡的 OR 值,HP 合并 NSAIDs 组为 20.31,明显高于 HP 组的 6.97 和 NSAIDs 组的 6.73,且大于两者之和,差异有统计学意义( $P < 0.05$ ),如表 1。

表 1 消化性溃疡的发生与服用 NSAIDs 药物和 HP 感染的关系

Table 1 Relation of occurrence in peptic ulcer with taking NSAIDs drugs and HP infection

Group	Peptic ulcer(n=300)	Control group(n=310)	OR	95%CI
No HP no NSAIDs group	49	93		
HP group	160	174	6.97 <sup>△</sup>	3.49-9.13
NSAIDs group	27	23	6.73 <sup>△</sup>	3.51-9.82
HP merger NSAIDs group	64	20	20.31	12.13-33.58

Note: Compared with the HP merger NSAIDs group,  $\Delta P < 0.05$ .

### 2.2 消化性溃疡合并出血与服用 NSAIDs 药物时间的关系

B 组的 OR 值为 3.79,C 组的 OR 值为 7.88,D 组的 OR 值

为 10.41,B 组  $<$  C 组  $<$  D 组,差异有统计学意义( $P < 0.05$ ),如表 2。

表 2 消化性溃疡合并出血与服用 NSAIDs 药物时间的关系

Table 2 Relationship between peptic ulcer combined with hemorrhage and the time after taking NSAIDs drugs

Group	Ulcer hemorrhage group (n=125)	Control group (n=310)	OR	95%CI
A group	79	260		
B group	19	22	3.79 <sup>*</sup>	2.45-6.73
C group	13	14	7.88 <sup>△</sup>	4.94-13.81
D group	14	13	10.41 <sup>△※</sup>	7.11-15.67

Note: Compared with group B, $\Delta P < 0.05$ ; Compared with group C,  $\ast P < 0.05$ .

### 2.3 消化性溃疡合并出血与服用 NSAIDs 药物和 HP 感染的关系

发生消化性溃疡合并出血的 OR 值,HP 合并 NSAIDs 组

为 13.31, 明显高于 HP 组的 1.12 和 NSAIDs 组的 1.54, 且大于两者之和, 差异有统计学意义( $P < 0.05$ ), 如表 3。

表 3 消化性溃疡合并出血与服用 NSAIDs 药物和 HP 感染的关系

Table 3 Relationship between Peptic ulcer combined with hemorrhage and taking NSAIDs drugs and HP infection

Group	Ulcer hemorrhage group (n=125)	No bleeding ulcer group (n=175)	OR	95%CI
No HP no NSAIDs group	5	45		
HP group	24	35	1.12 <sup>△</sup>	0.79-3.11
NSAIDs group	23	30	1.54 <sup>△</sup>	0.83-3.49
HP merger NSAIDs group	73	65	13.31	7.98-20.52

Note: Compared with the HP merger NSAIDs group,  $\Delta P < 0.05$ .

### 3 讨论

上消化道出血是临床常见急症<sup>[1]</sup>, 老年人由于长期服用 NSAIDs 药物、易感染 HP 等原因极易发生消化性溃疡, 胃粘膜受损, 再加上年龄性的胃血管硬化、胃蠕动功能减慢、胆汁和肠液通过老化的幽门括约肌反流等原因<sup>[2]</sup>, 发生上消化道出血的几率及风险明显增大, 严重影响老年人的生存质量。老年防治上消化道出血应针对病因进行治疗, 目前大部分研究认为服用 NSAIDs 药物和感染 HP 是导致老年上消化道出血最常见的原因<sup>[3,4]</sup>。资料显示<sup>[5,6]</sup>, 老年人为了预防心脑血管意外的发生, 常服用小剂量的阿司匹林, 阿司匹林属于 NSAIDs 药物, 水杨酸制剂, 能够通过降低环氧化酶活性, 抑制前列腺素的形成, 使胃黏膜的屏障作用减弱, 还可以直接损伤胃黏膜, 减少黏膜中生长因子含量, 妨碍黏膜再生, 同时抗血小板聚集的作用易诱发消化道出血。HP 感染是引起消化性溃疡的常见原因<sup>[7,8]</sup>, HP 是一种微需氧菌, 是目前已知的唯一胃部细菌, 溃疡患者 HP 检出率明显高于普通人, 其可以穿透胃黏膜粘液层, 使得胃泌素释放量增大, 胃中尿素酶、脂酶、蛋白酶等胃部消化酶增多, 同时释放大量细胞毒素, 引发炎症和免疫反应, 损伤胃黏膜, 还可以刺激胃酸分泌, 引起氢离子反渗加重黏膜损伤, 久之导致溃疡出血, 而且不易止血。目前, 对于服用 NSAIDs 药物和 HP 感染在上消化道溃疡出血中相互作用的研究尚无定论<sup>[9,20]</sup>, 一些学者认为两者具有协同作用, 同时存在时可增加出血发生率, 而另一些学者认为二者无明显的关联。本研究试图通过观察服用 NSAIDs 药物与 HP 感染与消化性溃疡合并出血发生的比值比(OR), 探究老年上消化道出血发病因素及与 HP 感染的相关性。

研究结果显示, 发生消化性溃疡的 OR 值, HP 合并 NSAIDs 组为 20.31, 明显高于 HP 组的 6.97 和 NSAIDs 组的 6.73, 且大于两者之和, 差异有统计学意义( $P < 0.05$ ), 提示服用 NSAIDs 药物与 HP 感染同时存在, 能够增加消化性溃疡的发生率; 消化性溃疡合并出血与服用 NSAIDs 药物时间的关系显示, B 组的 OR 值为 3.79, C 组的 OR 值为 2.88, D 组的 OR 值为 3.41, B 组 < C 组 < D 组, 差异有统计学意义( $P < 0.05$ ), 提示服用 NSAIDs 药物时间越长, 发生消化性溃疡出血的机会越

大; 发生消化性溃疡合并出血的 OR 值, HP 合并 NSAIDs 组为 13.31, 明显高于 HP 组的 1.12 和 NSAIDs 组的 1.54, 且大于两者之和, 差异有统计学意义( $P < 0.05$ ), 提示服用 NSAIDs 药物与 HP 感染同时存在, 能够提高消化性溃疡合并出血的发病率。

总之, 老年上消化道出血的发病主要与消化性溃疡有关, HP 感染与服用 NSAIDs 药物在发病过程中具有协同作用, 发生老年上消化道出血应注意根治 HP, 同时停用 NSAIDs 药物, 对临床具有指导意义, 值得临床推广。

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