

# 非甾体抗炎药相关消化性溃疡出血患者的临床特点及药学监护

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**摘要** 目的:总结非甾体抗炎药(NSAIDs)相关消化性溃疡出血患者的临床特点,探讨其实施药学监护的要点。方法:收集3家医院2013年5—12月非静脉曲张性上消化道出血住院患者282例的临床资料,根据入院前2周内有无NSAIDs服用史将患者分为NSAIDs组(59例)和非NSAIDs组(223例),对两组患者的年龄、性别、吸烟史、饮酒史、既往胃病史、消化道临床症状和服药情况进行分析比较,并提出药学监护要点:建立新入院患者药学评估制度、药师查房、个体化用药教育、预防NSAIDs相关性消化性溃疡的用药建议、随访。结果:NSAIDs组患者年龄( $63.79 \pm 10.94$ )岁, $\geq 65$ 岁37例(62.7%),22例患者(37.3%)有消化道症状;非NSAIDs组患者年龄( $50.03 \pm 12.95$ )岁, $\geq 65$ 岁82例(36.8%),151例(67.7%)有消化道症状。两组患者年龄、高龄患者所占比例、出血前有消化道症状的比例比较,差异有统计学意义( $P < 0.05$ ),而性别、吸烟史、饮酒史、既往胃病史比较,差异无统计学意义( $P > 0.05$ )。结论:NSAIDs相关消化性溃疡出血在高龄患者中多见,起病隐匿;长期服用阿司匹林或其他NSAIDs、合并使用其他易致溃疡的药物、空腹服药者更常见。临床药师应掌握NSAIDs相关消化性溃疡出血患者的临床特点,对NSAIDs相关消化性溃疡出血高危患者实施重点药学监护。

**关键词** 非甾体抗炎药;消化性溃疡出血;药学监护;临床特点

## Clinical Characteristics and Pharmaceutical Care of Patients with Peptic Ulcer Bleeding Induced by Non-steroidal Anti-inflammatory Drugs

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**ABSTRACT** OBJECTIVE: To summarize the clinical characteristics of the patients with peptic ulcer bleeding induced by non-steroidal anti-inflammatory drugs (NSAIDs) and explore the key points of pharmaceutical care. METHODS: The clinical information of 282 inpatients with non-variceal upper gastrointestinal bleeding from May to Dec. 2013 in 3 hospitals were collected and divided into NSAIDs group (59 cases) and non-NSAIDs group (223 cases) based on whether there was NSAIDs history 2 weeks before admission. The information was comparatively analyzed in aspects of age, gender, history of smoking, drinking and digestive diseases, gastrointestinal symptoms and medication, etc. Pharmaceutical care was conducted, including establishment of pharmacy assessment system for new admitted patients; pharmacist ward-rounds; individual medication education; medication suggestions of preventing peptic ulcer bleeding induced by NSAIDs and formulation of follow-up, etc. RESULTS: The age in NSAIDs group was ( $63.79 \pm 10.94$ ) years old; 37 patients were older than 65 years old (62.7%) and 22 patients (37.3%) had gastrointestinal symptoms. The age in non-NSAIDs group was ( $50.03 \pm 12.95$ ) years old; 82 patients were older than 65 years old (36.8%) and 151 patients (67.7%) had gastrointestinal symptoms. There were significant differences among the age, proportion of elderly patients and proportion of gastrointestinal symptoms before bleeding between 2 groups ( $P < 0.05$ ), and there were no significant differences among the gender and history of smoking, drinking and digestive diseases ( $P > 0.05$ ). CONCLUSIONS: Peptic ulcer bleeding induced by NSAIDs is common in elderly patients with insidious onset. More patients with gastrointestinal bleeding were found in long-term treatment of aspirin or other NSAIDs, combining with other drugs easily cause the occurrence of peptic ulcer, or taking medicine on an empty stomach. Clinical pharmacists should understand the clinical characteristics of patients with peptic ulcer bleeding induced by NSAIDs and implement key pharmaceutical care for these high-risk patients with peptic ulcer bleeding induced by NSAIDs.

**KEYWORDS** NSAIDs; Peptic ulcer; Pharmaceutical care; Clinical characteristics

非甾体抗炎药(Non-steroidal anti-inflammatory drugs, NSAIDs)是一类不含有甾体结构的抗炎药,广泛应用于抗炎、解热及镇痛,也是临床上心血管疾病、骨关节炎和风湿性疾病预防和治疗的常用药物之一。随着其在临床上的大量应用,其胃肠道副作用逐渐受到人们的重视,包括引起NSAIDs相关

性溃疡以及溃疡出血,甚至威胁服药者的生命安全<sup>[1]</sup>。本文回顾性收集了3家医院收治的非静脉曲张性上消化道出血患者的临床资料,根据是否使用NSAIDs对其进行分组,对比分析两组临床特点,并根据NSAIDs相关消化性溃疡出血患者的临床特点探讨其药学监护要点。

## 1 资料与方法

### 1.1 病例筛选

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收集江门市中心医院、柳州市人民医院和珠江医院2013年5—12月非静脉曲张性上消化道出血患者为研究对象。纳入标准:(1)患者有呕血、黑便症状及心率增快、血压降低等周围循环衰竭体征;(2)内镜检查无胃底静脉曲张并在上消化道发现有出血病灶。剔除标准:(1)消化道肿瘤;(2)门脉高压所致食管胃底静脉曲张破裂;(3)贲门黏膜撕裂综合征;(4)感染、肝肾功能障碍、凝血机制障碍等全身性疾病。

## 1.2 研究方法

共收集到符合入选标准的病历资料282例,将上消化道出血前2周内服用过NSAIDs的患者作为NSAIDs组(59例),未服用过NSAIDs的患者作为非NSAIDs组(223例),比较两组患者在性别、年龄、吸烟史、饮酒史、既往胃病史、消化道临床症状等方面差异;对NSAIDs组服药种类、服药剂量、疗程及合并用药情况进行分析。

## 1.3 统计学方法

采用SPSS19.0软件对数据进行统计处理。计量资料统计采用( $\bar{x} \pm s$ )表示,组间比较采用 $t$ 检验;计数资料统计采用例数(率或比)表示,采用卡方检验。 $P < 0.05$ 为差异有统计学意义。

## 2 结果

### 2.1 两组患者临床资料和特点比较

入选的282例患者平均年龄为( $54.70 \pm 13.86$ )岁,其中男性178例,女性104例,男:女=1.7:1。NSAIDs组患者平均年龄大,高龄患者多,出血前合并消化道症状少,与非NSAIDs组比较差异有统计学意义( $P < 0.05$ )。而两组患者性别、吸烟史、饮酒史、既往有消化道溃疡或出血史的比例比较,差异无统计学意义( $P > 0.05$ ),见表1。

表1 两组患者临床特点比较( $\bar{x} \pm s$ )

Tab 1 Comparison of clinical characteristics of patients between 2 groups( $\bar{x} \pm s$ )

项目	NSAIDs组( $n=59$ )	非NSAIDs组( $n=223$ )	检验值
年龄( $\bar{x} \pm s$ ),岁	63.79 ± 10.94	50.03 ± 12.95*	$t=3.96$
高龄(≥65岁)患者所占比例( $\bar{x} \pm s$ )	62.7% (37/59)	36.8% (82/223)*	$\chi^2=12.872$
性别(男/女),例	32/27	146/77	$\chi^2=2.529$
吸烟史(有/无),例	29/30	95/128	$\chi^2=0.813$
饮酒史(有/无),例	24/35	79/144	$\chi^2=0.555$
既往有消化道溃疡或出血史比例	11.9% (7/59)	16.1% (36/223)	$\chi^2=0.661$
出血前无消化道症状的比例	62.7% (37/59)	32.3% (72/223)*	$\chi^2=18.213$

注:与NSAIDs组比较,\* $P < 0.05$

Note: vs. NSAIDs group,\* $P < 0.05$

### 2.2 NSAIDs组患者服药情况比较

NSAIDs组患者中服用药物种类包括:阿司匹林26例(44.0%),布洛芬13例(22.0%),吲哚美辛4例(6.8%),保泰松3例(5.1%),双氯芬酸钠2例(3.4%),塞来昔布4例(6.8%),美洛昔康3例(5.1%),合用两种NSAIDs 4例(6.8%),合用其他易致溃疡的药物(如糖皮质激素、抗凝和抗血小板药物)13例(22.0%)。空腹服药患者35例(59.3%),遵医嘱餐后服药患者13例(22.0%),不定时服药患者11例(18.7%)。服用NSAIDs的患者均采用常规预防或治疗剂量,无过量服用。服用NSAIDs<1周患者5例(8.5%),用药1~2周患者17例(28.8%),用药疗程≥2周患者37例(62.7%)。

## 3 讨论

### 3.1 NSAIDs相关消化性溃疡出血患者的临床特点

3.1.1 高龄患者易发生 本次回顾性分析发现,发生NSAIDs相关性溃疡的患者平均年龄较干预前组的患者大,尤其以高龄患者偏多,与既往研究<sup>[2-3]</sup>相似。原因与老年人的多聚半乳

糖醛酸酶(Polygalacturonase,PG)合成相对减少,从而导致黏膜血流量减少,最终引起上皮修复能力降低而导致黏膜防御功能减退有关。另一方面,老年患者多患有糖尿病、高血压、动脉硬化等疾病,导致微循环功能相对减退,胃黏膜缺血、淤血、缺氧状态使其易于损伤、糜烂甚至出血。此外,老年人肝肾功能减退使得NSAIDs在体内代谢减慢而易蓄积,从而增加其毒性。

3.1.2 既往消化道溃疡或出血史 有临床研究表明,既往有消化性溃疡史的患者服用NSAIDs出现溃疡并发症的几率增加<sup>[4]</sup>,但笔者发现既往消化道溃疡或出血史在两组出血患者中差异无统计学意义( $P > 0.05$ ),与贺少枫等<sup>[5]</sup>的研究结果类似。可能与明确有溃疡病史的患者往往慎用NSAIDs,另外老年人及NSAIDs诱发的溃疡常为无痛性,许多溃疡并未诊断等原因有关。

3.1.3 起病隐匿,消化道临床症状不明显 由于NSAIDs的强力镇痛作用,NSAIDs诱发的上消化道溃疡或出血常为无痛性,消化道症状不明显,多以严重出血为首发症状。本次分析中,NSAIDs组62.7%的病例出血前无任何消化道症状,直接表现为黑便和/或呕血,远高于干预前组(32.3%)。

3.1.4 用药情况 用糖皮质激素或抗凝剂等均是NSAIDs相关性溃疡并发症的危险因素,本次分析也证实这点,同时发现发生NSAIDs相关性溃疡出血的患者服药依从性较差,空腹服药和不定时服药者多。

### 3.2 NSAIDs相关消化性溃疡患者的药学监护要点

3.2.1 建立新入院患者药学评估制度 要求药师了解患者的疾病情况、既往服用NSAIDs及合并用药情况,评估患者服用NSAIDs的危险性,对NSAIDs相关消化性溃疡的高危患者实施重点药学监护,并建立患者信息库用以管理及随访。

3.2.2 药师查房 要求药师在查房过程中及时全面地掌握患者的疾病信息和治疗情况。由于NSAIDs相关消化性溃疡常不合并消化道症状,而无症状的NSAIDs溃疡又更易并发出血<sup>[6]</sup>,因此在日常查房过程中,除了询问患者是否有胃肠道不适外,还应密切监测患者是否出现黑便,定期检查大便潜血。

3.2.3 个体化用药教育 重点教育患者严格按照时按量服药,避免空腹,避免两种或两种以上NSAIDs同时服用。教育患者如何及早发现NSAIDs相关胃肠道不良反应,包括上腹疼痛、恶心、呕吐、黑便和呕血,一旦发生应及时停药和就诊。对于肾功能不全的患者,应尽量避免使用NSAIDs或使用其最低有效剂量;对于肝功能不全的患者,应避免使用双氯芬酸等肝损伤比较大的NSAIDs<sup>[6]</sup>;对于既往有心血管病史的高龄患者,还应评估心血管事件的风险,可选择心血管风险较小的萘普生,避免使用增加心血管事件的特异性环氧酶(COX)-2抑制剂<sup>[7]</sup>。

3.2.4 预防NSAIDs相关性消化性溃疡的用药建议 不同种类NSAIDs对胃肠道损害的危险系数不同,与非选择性NSAIDs相比,选择性COX-2抑制剂的胃肠道风险较低。系统性回顾发现,醋氯芬酸、塞来昔布、布洛芬的胃肠道风险最低,罗非昔布、舒林酸、双氯芬酸、美洛昔康、尼美舒利的胃肠道风险居中,吲哚美辛、吡罗西康、阿扎丙宗的胃肠道风险最高<sup>[8]</sup>。质子泵抑制剂(PPI)可预防NSAIDs相关性胃病已有明确结论<sup>[9]</sup>。美国非甾体抗炎药相关消化性溃疡并发症的预防指南总结了对NSAIDs相关消化性溃疡的预防措施<sup>[10]</sup>:目前并发有消化道溃疡的患者属于极高危人群,应避免使用NSAIDs;若不能停用NSAIDs,应使用COX-2抑制剂加米索前列醇或PPI;有消化道溃疡史的患者(无论有无并发症),既往或目前服用阿司匹林、抗血小板药物、抗凝剂或糖皮质激素,或≥2种危险因素,同样列入高危级别中,此类患者也应使用COX-2抑制剂加米索前列醇或PPI治疗;中危患者可单独使用COX-2抑制剂,或使用

# 临床药师干预前后经皮介入封堵术围术期抗菌药物应用分析

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**摘要** 目的:探讨临床药师参与经皮介入封堵术(TC)围术期预防用药管理对提高TC用药合格率的作用。方法:随机抽取2011年6月—2012年5月(干预前)、2012年6月—2013年5月(干预后)我院先心内科住院行TC患者病历各75例,对干预前后TC围术期药物选择、给药时机、持续用药时间、分级管理合格率等方面的合理性进行比较。结果:经过干预,TC围术期抗菌药物选择合格率从66.4%提高至98.7%,给药时机合格率从76.7%提高至98.1%,持续用药时间合格率由22.9%提高至98.9%,分级管理合格率由92.3%提高至100%,总DDDs明显下降,与干预前比较差异均有统计学意义( $P < 0.01$ 或 $P < 0.05$ )。结论:临床药师参与用药管理,对提高TC围术期用药合格率起到了积极的推动作用。

**关键词** 经皮介入封堵术;围术期;抗菌药物;临床药师;干预

## Application Analysis of Antibiotics in the Perioperative Period of Percutaneous Transcatheter Closure before and after Intervention by Clinical Pharmacists

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**ABSTRACT** **OBJECTIVE:** To explore the effects of clinical pharmacists participating in perioperative prophylaxis management of percutaneous transcatheter closure (TC) on the improvement of qualified rate of TC medication. **METHODS:** The records of inpatients with TC in the cardiology department of our hospital from Jun. 2011 to May 2012 (before intervention) and Jun. 2012 to May 2013 (after intervention) were randomly collected, 75 cases for each. The rationalities in the TC perioperative were compared before and after intervention, including the qualified rate of drug selection, duration time, continued treatment time and graded management, etc. **RESULTS:** After intervention, the qualified rate of antibiotics selection in the TC perioperative was increased from 66.4% to 98.7%, the qualified rate of duration time was increased from 76.7% to 98.1%, the qualified rate of continued treatment time was increased from 22.9% to 98.9% and the qualified rate of graded management was increased from 92.3% to 100%. The total DDDs was significantly decreased, compared with before intervention, there was significant difference ( $P < 0.01$  or  $P < 0.05$ ). **CONCLUSIONS:** Clinical pharmacists participating in the medication management plays a positive role in the improvement of the qualified rate of TC perioperative period medication.

**KEYWORDS** Percutaneous transcatheter closure; Perioperative period; Antibiotics; Clinical pharmacist; Intervention

非选择性NSAIDs+米索前列醇或PPI治疗。

3.2.5 随访制度 要求药师通过门诊或住院随诊、电话回访等方式为患者提供定期随访,预防并及时发现NSAIDs相关药品不良反应。

综上所述,NSAIDs相关消化性溃疡出血临床多见,临床药师应加强对NSAIDs相关消化性溃疡出血患者的临床特点的认识,对其高危患者实施重点药学监护。

### 参考文献

- [1] Ahsberg K, Höglund P, Kim WH, *et al.* Impact of aspirin, NSAIDs, warfarin, corticosteroids and SSPIs on the site and outcome of nonvariceal upper and lower gastrointestinal bleeding[J]. *Scand J Gastroenterol*, 2010, 45(12): 1 404.
- [2] 陈小良,李建忠,杨逸冬,等.非甾体抗炎药相关性溃疡并出血临床特征[J]. *中山大学学报:医学科学版*, 2011, 32(6): 764.

- [3] 贺少枫,夏文阳,郭健.非甾体抗炎药致上消化道出血的相关性研究[J]. *中国医师进修杂志*, 2010, 33(4): 33.
- [4] 吴松兵,李松长,黄永华.非甾体抗炎药相关性上消化道出血的危险因素分析[J]. *当代医学*, 2012, 18(19): 116.
- [5] 陆福山,邓书禄,邓晶.老年人非甾体抗炎药相关性消化性溃疡出血的临床探讨[J]. *临床合理用药*, 2010, 3(12): 87.
- [6] 潘美芳.双氯芬酸钠致肝损伤19例诊治体会[J]. *社区医师:医学专业*, 2011, 13(12): 133.
- [7] 刘明伟,杨利荣.非甾体类抗炎药对冠心病的影响[J]. *中华全科医学*, 2009, 7(4): 408.
- [8] Castellsague J, Riera-Guardia N, Calingaert B, *et al.* Individual NSAIDs and upper gastrointestinal complications: a systematic review and meta-analysis of observational studies (the SOS project) [J]. *Drug Saf*, 2012, 35(12): 112.
- [9] 郑力搏,张晓岚.质子泵抑制剂预防非甾体抗炎药相关性胃病的研究进展[J]. *中国病理生理杂志*, 2010, 26(11): 2 274.
- [10] Lanza FL, Chan FK, Quigley EM. Guidelines for prevention of NSAID-related ulcer complications[J]. *Am J Gastroenterol*, 2009, 104(3): 728.

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