

doi: 10.13241/j.cnki.pmb.2017.22.020

急诊内镜下止血联合生长抑素治疗上消化道出血的疗效分析

邬振国¹ 董 蕾² 陈永永¹ 张攸君¹ 黄 咪¹ 周高东¹

(1 陕西省安康市人民医院消化内科 陕西 安康 725000; 2 西安交通大学第二附属医院消化内科 陕西 西安 710004)

摘要 目的:探讨急诊内镜下止血联合生长抑素治疗上消化道出血的疗效。**方法:**选取了 100 例上消化道出血患者,按随机数字表法分为两组,对照组(48 例)给予常规止血措施,观察组(52 例)行急诊内镜下止血联合生长抑素治疗上消化道出血,通过观察并记录两组患者疗效、不同病灶大小的治疗成功率及临床症状改善情况,评估急诊内镜下止血联合生长抑素治疗上消化道出血的疗效。**结果:**观察组患者治疗有效率 88.5%,对照组患者治疗有效率 70.8%,观察组治疗有效率高于对照组($P<0.05$);观察组对不同病变大小止血成功率均高于对照组($P<0.05$);从止血治疗成功率来看,随着病变大小的增加,止血成功率有所下降,观察组患者住院时间,大便潜血转阴,呕血消失时间均短于对照组($P<0.05$),并且术后再出血率也低于对照组患者($P<0.05$)。**结论:**急诊内镜下止血联合生长抑素对上消化道出血具有良好的治疗效果,能明显改善上消化道出血症状,缩短患者住院时间,但对病变范围较大的上消化道出血,治疗效果有限。

关键词:急诊内镜;生长抑素;上消化道出血;临床症状;药物喷洒

中图分类号:R573.2 **文献标识码:**A **文章编号:**1673-6273(2017)22-4289-03

Efficacy of Emergency Endoscopic Hemostasis Combined with Somatostatin in Treatment of Upper Gastrointestinal Hemorrhage

WU Zhen-guo¹, DONG Le², CHEN Yong-yong¹, ZHANG You-jun¹, HUANG Mi¹, ZHOU Gao-dong¹

(1 Department of gastroenterology, Ankang People's Hospital, Ankang, Shaanxi, 725000, China;

2 Department of gastroenterology, The Second Affiliated Hospital of Xi'an Jiaotong University, Xi'an, Shaanxi, 710004, China)

ABSTRACT Objective: To discuss the efficacy of emergency endoscopic hemostasis combined with somatostatin in treatment of upper gastrointestinal hemorrhage. **Methods:** 100 patients with upper gastrointestinal hemorrhage were selected and divided into two groups randomly. The control group (48 cases) was given conventional hemostatic measures. The observation group (52 cases) was given emergency endoscopic hemostasis combined with somatostatin. The efficacy of emergency endoscopic hemostasis combined with somatostatin in treatment of upper gastrointestinal hemorrhage was evaluated by efficacy, the curative success rate and the improvement situation of clinical symptoms. **Results:** The effective rate was 88.5% in the observation group, and the effective rate was 70.8% in the control group, and the effective rate of observation group was higher than that of the control group ($P<0.05$). The success rate for different lesion size was higher in the observation group compared with control group ($P<0.05$). According to the success rate, with the increased size of lesion, the hemostasis rate was decreased. The hospitalization, negative fecal occult and haematemesis disappeared time of observation group was shorter than that of the control group ($P<0.05$). The postoperative bleeding rate of observation group was lower than that of the control group ($P<0.05$). **Conclusions:** The emergency endoscopic hemostasis combined with somatostatin has a good therapeutic effect on upper gastrointestinal hemorrhage. It can improve the clinical symptoms and shorten the hospitalization time, but its effect is limited on large lesion of upper gastrointestinal hemorrhage.

Key words: Emergency endoscopy; Somatostatin; Upper gastrointestinal hemorrhage; Clinical symptoms; Drug spraying

Chinese Library Classification(CLC): R573.2 **Document code:** A

Article ID: 1673-6273(2017)22-4289-03

前言

上消化道出血是临床内科常见急症,该病发生、发展较快,依据病灶大小不同,患者出血量也不同。对于出血量较小的患者,常规静脉给予止血药物措施就可起效^[1,2]。然而对于出血量较大的患者,常规止血措施止血效果有限,患者治疗后容易再

出血^[3,4]。为了提高对出血部位的止血效果,降低再出血发生率,运用胃镜探明病灶发病情况能起到非常好的临床效果。再结合消化内科常用的止血药物,如生长抑素,可提高对病灶部位止血的成功率^[5]。为了探明急诊内镜下止血联合生长抑素对上消化道出血的止血效果,本研究回顾性分析我院收治的 100 例上消化道出血的患者,报道如下。

1 资料与方法

1.1 病例资料

选取上消化道出血患者 100 例,年限:2013 年 3 月 -2015

作者简介:邬振国(1975-),男,硕士研究生,副主任医师,主要研究方向:消化内科,电话:15829455502,

E-mail: wuzhenguo_1975@medicinepaper.cn

(收稿日期:2016-10-22 接受日期:2016-11-17)

年3月,均为我院消化内科收治的患者,纳入标准:①经内镜诊断,确诊为上消化道出血并采用 Forrest 分级评定病变出血征象;②临床表现为便血、呕血;③经本院伦理委员会同意,治疗前患者均签署书面知情同意书。排除标准:原发性高血压、凝血

功能障碍、肝肾功能不全患者。按随机数字表法将患者分为两组,观察组(52例)给予急诊内镜下止血联合生长抑素,对照组(48例)采取常规止血措施,两组患者病例资料具有可比性,见表1($P>0.05$)。

表1 两组临床资料对比
Table 1 Comparison of clinical data between two groups

	Observation group (n=52)	Control group (n=48)
Gender (male/female)	34/18	32/16
Age (year)	56.21± 9.37	58.19± 10.71
Disease type		
Ulcer of digestive tract	20	18
Acute gastric mucosa lesion	11	12
Upper gastrointestinal tumor	8	7
Chronic inflammation	6	6
Vascular malformation	7	5
Forrest Classification		
I a	26	24
I b	15	14
II a	11	10
Lesion size (cm)	2.3± 1.7	2.5± 1.6

1.2 治疗方法

对照组:常规止血治疗,包括止血、抗休克、抑酸、血容量补充等。以3d为1个疗程,共治疗1个疗程。

观察组:在对照组常规治疗基础之上,行急诊内镜检查,内镜下寻找出血部位,对出血部位采用喷洒凝血酶的方式进行止血,内镜下药物喷洒结束后,静脉注射生长抑素(扬子江药业集团有限公司,规格:3mg,批准文号:国药准字H20066708),首剂量0.25mg,之后以0.25mg/h维持剂量持续滴注24h。以3d为1个疗程,共治疗1个疗程。

1.3 观察指标

①疗效标准^[6,7]:显效,治疗后24h内止血,大便转黄,未见便血,内镜下未见明显活性出血;有效,治疗后24-72h内止血,仍能观察到便血,但内镜下可见少量出血;无效,治疗后72h

后仍未止血,临床症状未改善,内镜下仍能观察到活动性出血;

②临床症状改善情况:观察并记录两组患者住院时间,大便潜血转阴,呕血消失时间及再出血情况;③观察上述治疗方法对不同病变大小的止血成功率。

1.4 统计方法

采用SPSS 17.0统计软件分析,数据以 $\bar{x} \pm s$ 表示,组内术前与术后相比采用配对t检验,组间比较采用两独立样本t检验,计数资料采用卡方检验,以 $P<0.05$ 为差异有统计学意义。

2 结果

2.1 疗效比较

观察组患者治疗有效率88.5%,对照组患者治疗有效率70.8%,观察组有效率高于对照组($P<0.05$),见表2。

表2 两组疗效对比 [n(%)]
Table 2 Comparison of efficacy between two groups [n(%)]

	n	Markedly effective	Effective	Ineffective	Effective rate
Observation group	52	36	10	6	88.5%*
Control group	48	22	12	14	70.8%

Note: compared with the control group, * $P<0.05$.

2.2 不同病变大小治疗成功率比较

观察组对不同病变大小止血成功率均高于对照组($P<0.05$),从止血治疗成功率来看,随着病变大小的增加,止血成功率有所下降,见表3。

2.3 临床症状改善情况比较

观察组患者住院时间,大便潜血转阴,呕血消失时间均短于对照组($P<0.05$),并且术后再出血率也低于对照组患者($P<0.05$),见表4。

表 3 两组对不同病变大小止血成功率的对比 [n(%)]

Table 3 Comparison of bleeding success rate for different lesion size between two group [n(%)]

Group	n	<1 cm	1-2 cm	>2cm
Observation group	52	37/38(97.4) *	6/8(75.0) *	3/6(50.0) *
Control group	48	30/36(83.3)	3/7(42.9)	1/5(20.0)

表 4 两组临床症状改善情况比较

Table 4 Comparison of clinical symptoms improvement between two groups

Groups	n	Hospitalization (d)	Negative fecal occult blood (d)	Hematemesis disappear (d)	Rebleeding [n(%)]
Observation group	52	5.84± 1.22*	3.21± 0.37*	2.53± 0.45*	3(5.8) *
Control group	48	12.16± 2.37	7.44± 0.69	4.31± 0.57	9(18.8)

Note: compared with the control group, *P<0.05.

3 讨论

上消化道出血为临床危急症,需要及时确诊出血部位并予以有效止血,当出血总量在短时间内高于 1 L 或超过患者自身血容量的 20 %时,可引发失血性休克从而危及患者生命^[8-10]。上消化道出血的发病诱因种类繁多,常见的有消化道溃疡、急性胃粘膜病变、上消化道肿瘤、慢性炎症等。早期行胃镜检查,可及时确诊出血部位,采取止血措施^[11,12]。胃黏膜组织具有较强的自我修复能力,损伤后 24 h 内能够进行自我修复,因此消化道出血后 24 h 是内镜下止血措施的有效治疗时间^[13,14]。

常规治疗多以保守药物治疗为主,生长抑素为临床治疗上消化道出血的常用药物,其抑制上消化道出血的机制如下:①通过抑制胃蛋白酶、胃泌素的释放,减少胃酸分泌和对已形成血凝块的溶解;②通过收缩内脏血管,减少内脏血流量,从而降低病灶部位出血速度;③抑制胃肠收缩,降低胃壁对血凝块挤压的概率。然而药物治疗所需止血时间较长且疗效不理想,延误了止血的最佳时机,患者治疗后容易发生再出血。内镜是消化内科常用的诊疗器械,可快速探查出血部位情况,有利于选择治疗方法^[15-17]。有研究表明,急诊内镜一般宜在患者入院 12-24 h 以内进行,对急性大出血患者,内镜检查越早越好^[18]。内镜下止血的方法有药物喷洒、药物注射、钛夹法、电凝法等。本研究采用的是药物喷洒凝血酶的方式进行止血,喷洒的过程中,除了凝血酶发挥止血功效外,冲洗液还能对消化道管腔残留血液进行清洗。

鲁建斌^[19]等采用急诊内镜下止血联合生长抑素治疗上消化道出血患者 43 例,治疗后有效率为 97.7 %,有效率明显高于常规治疗的对照组患者。本研究中,采用急诊内镜下止血联合生长抑素治疗上消化道出血具有更好的止血效果,有效率达到 88.5 %。同时本研究发现观察组对不同病变大小的止血成功率均高于对照组(P<0.05),从止血治疗成功率来看,随着病变大小的增加,止血成功率有所下降。说明无论常规止血措施,还是内镜下止血联合生长抑素,随着病变大小范围增大,止血效果均会下降。但内镜下止血联合生长抑素对 0-2 cm 病变仍具有比较好的止血效果。上消化道出血后,患者表现出呕血和便血,观

察这两个指标可以较为明显的判断患者上消化道出血症状。沈永祥等^[20]采用内镜下金属钛夹治疗上消化道出血 48 例,治疗后患者引流管变清、呕血消失、潜血转阴的时间明显短于内镜下注射药物止血的患者。本研究中,观察组患者住院时间,大便潜血转阴,呕血消失时间均短于对照组(P<0.05),并且术后再出血率也低于对照组患者(P<0.05),说明内镜下止血联合生长抑素可以较好地改善患者上消化道出血症状,减少病灶部位再出血,缩短患者住院时间。虽然与沈永祥在止血方法上不同,但均达到了缩短临床症状消失时间的目的。

综上所述,急诊内镜下止血联合生长抑素对上消化道出血具有良好的治疗效果,能明显改善上消化道出血症状,缩短患者住院时间,但对病变范围较大的上消化道出血,治疗效果有限。

参考文献 (References)

- [1] Lim JU, Park JJ, Youn YH, et al. Predictive Factors for Endoscopic Visibility and Strategies for Pre-endoscopic Prokinetics Use in Patients with Upper Gastrointestinal Bleeding [J]. Dig Dis Sci, 2015, 60(4): 957-965
- [2] Heining-Kruz S, Finkenzeller T, Schreyer A, et al. Transcatheter arterial embolisation in upper gastrointestinal bleeding in a sample of 29 patients in a gastrointestinal referral center in Germany [J]. Z Gastroenterol, 2015, 53(9): 1071-1079
- [3] Yamaguchi D, Sakata Y, Tsuruoka N, et al. Characteristics of patients with non-variceal upper gastrointestinal bleeding taking antithrombotic agents[J]. Dig Endosc, 2015, 27(1): 30-36
- [4] Lee HH, Park JM, Chun HJ, et al. Transcatheter arterial embolization for endoscopically unmanageable non-variceal upper gastrointestinal bleeding[J]. Scand J Gastroenterol, 2015, 50(7): 809-815
- [5] Gralnek IM, Ching JY, Maza I, et al. Capsule endoscopy in acute upper gastrointestinal hemorrhage: a prospective cohort study [J]. Endoscopy, 2013, 45(1): 12-19
- [6] Klein A, Gralnek IM. Acute, nonvariceal upper gastrointestinal bleeding[J]. Curr Opin Crit Care, 2015, 21(2): 154-162
- [7] 张丽, 刘运祥, 黄留业, 等. 内镜下注射硬化剂治疗食管贲门粘膜撕裂综合症的临床研究 [J]. 现代生物医学进展, 2012, 12(18): 3498-3501

(下转第 4238 页)

- dual roles in renal injury and repair [J]. *J Pathol*, 2013, 229 (2): 221-231
- [10] Villanueva S, Contreras F, Tapia A, et al. Basic fibroblast growth factor reduces functional and structural damage in chronic kidney disease[J]. *Am J Physiol Renal Physiol*, 2014, 306(4): F430-F441
- [11] Taguchi A, Kaku Y, Ohmori T, et al. Redefining the in vivo origin of metanephric nephron progenitors enables generation of complex kidney structures from pluripotent stem cells[J]. *Cell Stem Cell*, 2014, 14(1): 53-67
- [12] Lin S L, Li B, Rao S, et al. Macrophage Wnt7b is critical for kidney repair and regeneration [J]. *Proc Natl Acad Sci U S A*, 2010, 107(9): 4194-4199
- [13] Tan R J, Zhou D, Zhou L, et al. Wnt/ β -catenin signaling and kidney fibrosis[J]. *Kidney International Supplements*, 2014, 4(1): 84-90
- [14] Sun Y, Koo S, White N, et al. Development of a micro-array to detect human and mouse microRNAs and characterization of expression in human organs[J]. *Nucleic Acids Res*, 2004, 32(22): e188
- [15] McClelland A D, Herman-Edelstein M, Komers R, et al. miR-21 promotes renal fibrosis in diabetic nephropathy by targeting PTEN and SMAD7[J]. *Clin Sci (Lond)*, 2015, 129(12): 1237-1249
- [16] Wang J, Wang S, Duan L, et al. Downregulation of miR-30c promotes renal fibrosis by target CTGF in diabetic nephropathy [J]. *J Diabetes Complications*, 2016, 30(3): 406-414
- [17] Liu H, Wang X, Liu S, et al. Effects and mechanism of miR-23b on glucose-mediated epithelial-to-mesenchymal transition in diabetic nephropathy[J]. *Int J Biochem Cell Biol*, 2016, 70: 149-160
- [18] Wei C, Kim I K, Kumar S, et al. NF- κ B mediated miR-26a regulation in cardiac fibrosis[J]. *J Cell Physiol*, 2013, 228(7): 1433-1442
- [19] Liang H, Liu S, Chen Y, et al. miR-26a suppresses EMT by disrupting the Lin28B/let-7d axis: potential cross-talks among miRNAs in IPF[J]. *J Mol Med (Berl)*, 2016, 94(6): 655-665
- [20] Li X, Liu L, Shen Y, et al. MicroRNA-26a modulates transforming growth factor beta-1-induced proliferation in human fetal lung fibroblasts[J]. *Biochem Biophys Res Commun*, 2014, 454(4): 512-517
- [21] Ichii O, Otsuka-Kanazawa S, Horino T, et al. Decreased miR-26a expression correlates with the progression of podocyte injury in autoimmune glomerulonephritis[J]. *Plos One*, 2014, 9(10): 110-128
- [22] Koga K, Yokoi H, Mori K, et al. MicroRNA-26a inhibits TGF- β -induced extracellular matrix protein expression in podocytes by targeting CTGF and is downregulated in diabetic nephropathy [J]. *Diabetologia*, 2015, 58(9): 2169-2180
- [23] Stein U, Arlt F, Smith J, et al. Intervening in beta-catenin signaling by sulindac inhibits S100A4-dependent colon cancer metastasis [J]. *Neoplasia*, 2011, 13(2): 131-144
- [24] 林高阳. miR-26a 靶向 GSK-3 β 调控 β -catenin 信号通路增强肺癌细胞转移潜能的机制研究[D]. 天津医科大学, 2015
- Lin Gao-yang. miR-26a enhances metastasis potential of lung cancer cells via β -catenin pathway by targeting GSK-3 β [D]. TianJin medical university, 2015

(上接第 4291 页)

- Zhang Li, Liu Yun-xiang, Huang Liu-ye, et al. Endoscopic Sclerosing Agent Injection for Treatment of Mallory-Weiss Syndrome [J]. *Progress in Modern Biomedicine*, 2012, 12(18): 3498-3501
- [8] 李晓萍, 蒲友敏, 屈纪富. 急性上消化道出血的病因及相关因素分析[J]. *现代生物医学进展*, 2013, 13(18): 3499-3502
- Li Xiao-ping, Pu You-min, Qu Ji-fu. Analysis of Pathogenesis and Correlative Factors of Acute Upper Gastrointestinal Hemorrhage[J]. *Progress in Modern Biomedicine*, 2013, 13(18): 3499-3502
- [9] Tjwa ET, Holster IL, Kuipers EJ. Endoscopic management of nonvariceal, nonulcer upper gastrointestinal bleeding [J]. *Gastroenterol Clin North Am*, 2014, 43(4): 707-719
- [10] Kataoka M, Kawai T, Hayama Y, et al. Comparison of hemostasis using bipolar hemostatic forceps with hemostasis by endoscopic hemoclipping for nonvariceal upper gastrointestinal bleeding in a prospective non-randomized trial[J]. *Surg Endosc*, 2013, 27(8):3035-3038
- [11] Nanavati SM. What if endoscopic hemostasis fails? Alternative treatment strategies: interventional radiology [J]. *Gastroenterol Clin North Am*, 2014, 43(4): 739-752
- [12] Krishnan A, Velayutham V, Satyanesan J, et al. Role of endoscopic band ligation in management of non-variceal upper gastrointestinal bleeding[J]. *Trop Gastroenterol*, 2013, 34(2): 91-94
- [13] Jung S, Kim EH, Kim HY, et al. Factors that affect visibility during endoscopic hemostasis for upper GI bleeding: a prospective study[J]. *Gastrointest Endosc*, 2015, 81(6): 1392-1400
- [14] Chan SM, Chiu PW, Teoh AY, et al. Use of the Over-The-Scope Clip for treatment of refractory upper gastrointestinal bleeding: a case series[J]. *Endoscopy*, 2014, 46(5): 428-431
- [15] Mavrodin CI, Pariza G, Iordache V, et al. Massive upper gastrointestinal bleeding - complication of pancreatic pseudocyst[J]. *J Med Life*, 2014, 7(2): 202-204
- [16] O'Byrne M, Smith-Windsor EL, Kenyon CR, et al. Regional differences in outcomes of nonvariceal upper gastrointestinal bleeding in Saskatchewan[J]. *Can J Gastroenterol Hepatol*, 2014, 28(3): 135-139
- [17] Brock AS, Rockey DC. Mechanical Hemostasis Techniques in Nonvariceal Upper Gastrointestinal Bleeding [J]. *Gastrointest Endosc Clin N Am*, 2015, 25(3): 523-533
- [18] Chen YI, Barkun A, Nolan S. Hemostatic powder TC-325 in the management of upper and lower gastrointestinal bleeding: a two-year experience at a single institution[J]. *Endoscopy*, 2015, 47(2): 167-171
- [19] 鲁建斌. 急诊内镜下止血联合生长抑素治疗上消化道出血的临床价值分析[J]. *医学信息*, 2014, 27(5): 50
- Lu Jian-bin. Clinical Analysis of Gastrointestinal Hemorrhage Bleeding Combined with Somatostatin in the Treatment of Emergent Endoscopic[J]. *Medical Information*, 2014, 27(5): 50
- [20] 沈永祥, 陈军贤. 内镜下金属钛夹治疗上消化道出血的效果比较[J]. *中国医药导报*, 2014, 11(9): 51-53
- Shen Yong-xiang, Chen Jun-xian. Effect of endoscopic metal titanium clamp for treatment of acute upper gastrointestinal bleeding[J]. *China Medical Herald*, 2014, 11(9): 51-53