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消化道出血病因的临床分析*

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摘要 目的:回顾性分析消化道出血的病因构成、相关因素及治疗情况。**方法:**收集 2008 年 7 月至 2013 年 9 月因消化道出血在沈阳军区总医院消化内科住院的患者资料,包括患者的一般资料、入院日期、病因、出血部位、生命体征、疾病史。依据消化道出血程度分为轻度组(86 例)、中度组(90 例)、重度组(132 例),分析消化道出血的病因特征。**结果:**与轻度组比较,重度组上消化道出血患者比例较高,中、重度组 Blatchford 评分、心率、尿素、血肌酐、凝血酶原时间、INR、血糖明显升高($P<0.05$);收缩压、舒张压、红细胞、血红蛋白、总蛋白、白蛋白、总胆固醇明显减低($P<0.05$)。重度组患有食管胃底静脉曲张的比例较高,行内镜下治疗的比例高($P<0.05$)。**结论:**根据患者出血程度可初步判断患者消化道出血的部位及病因,为临床诊治提供有价值的参考依据。

关键词:消化道出血;病因;治疗

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Clinical Analysis of Gastrointestinal Bleeding*

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ABSTRACT Objective: To explore the spectrum and frequency causes, correlative factors and therapy of gastrointestinal bleeding. **Methods:** The medical records of three hundred and eight cases of gastrointestinal bleeding patients admitted in our hospital from July 2008 to September 2013 were collected, including clinical conditions, admission time, causes, bleeding points, vital signs, and medical history. According to the bleeding degree, they were divided into three groups (mild, moderate and severe). The feature of gastrointestinal bleeding causes was analyzed. **Results:** The incidence rate of upper gastrointestinal bleeding was significantly higher in severe group than that of mild group. The Blatchford scoring system, heart rate, blood urea nitrogen, creatinine, prothrombin time, INR for prothrombin time, and blood glucose level were significantly higher in severe group and moderate group than those in mild group ($P<0.05$), while the systolic blood pressure, diastolic blood pressure, red blood cell, hemoglobin, total protein, albumin, and total cholesterol, were significantly lower in severe group and moderate group than those in mild group($P<0.05$). The percentage of esophageal-gastric varices and endoscopic treatment were significantly higher in severe group ($P<0.05$). **Conclusion:** The position and causes of gastrointestinal bleeding could be evaluated according to the bleeding degree, which would provide references for the diagnose and treatment of gastrointestinal bleeding.

Key words: Gastrointestinal bleeding; Etiology; Treatment

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前言

消化道出血是消化系统最常见的急症,可发生在消化道的任何位置,病情严重者甚至可以危及生命。消化道出血的病因多种多样,临床表现复杂^[1],出血严重程度与病因及出血部位密切相关。目前,关于消化道出血的病因日趋受到重视,随着消化道出血治疗方案的增加,消化道出血的治疗越来越有针对性,病因预测已成为临床工作的重点。目前,年代变化、发病季节、性别、年龄均为消化道出血的相关因素^[2-4],但出血严重程度对于病因的早期预测价值有待进一步研究。本研究回顾性分析了本院收治的 308 例消化道出血患者的临床资料,旨在总结消化道出血病因的临床特征,现将结果报道如下。

1 材料与方法

1.1 研究对象

收集 2008 年 7 月~2013 年 9 月在沈阳军区总医院消化内科住院的 308 例消化道出血患者的临床资料,年龄 34~87 (62.76±11.57)岁,男 244 例,女 84 例,男:女=2.90:1。消化道出血诊断依据:临床症状表现为呕血、黑便、胃管及胃肠减压管引出咖啡样物质,伴有血红蛋白降低,粪便、胃内容物、胃液隐血实验阳性等实验室证据。内镜下判断有活动性出血及近期出血或内镜下病理确诊。排除口、鼻、咽部或呼吸道出血被吞入食管,服用某些药物(如铁剂、铋剂等)或食物(如动物血等)引起粪便发黑^[5]。静脉曲张出血依据:(1)静脉曲张伴活动性出血;(2)静

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脉曲张表面有白色血栓;(3)静脉曲张表面有血凝块;(4)存在静脉曲张但无其他潜在的原因可以解释出血^[6]。根据消化道出血病情严重程度分级^[5],依据患者症状、生命体征、实验室检验指标等将 308 例消化道出血患者分为轻度组 86 例、中度组 90 例、重度组 132 例。

1.2 方法

收集患者入院时的临床资料,包括患者的一般资料、入院日期、病因、出血部位、生命体征、疾病史、抽血化验指标。入院后,患者静息 30 分钟后测量血压。禁食 12 小时后,于入院第 2 天清晨采静脉血 1 小时内分离血清。应用日本 AIA-1800 全自动微粒子化学发光仪,试剂为仪器配套试剂盒,采用化学发光

免疫法检测相关指标,操作按试剂盒说明书进行。依据尿素氮、血红蛋白、生命体征对消化道出血患者进行 Blatchford 评分。

1.3 统计学方法

采用 SPSS18.0 统计软件进行分析,计量数据用 $\bar{x} \pm s$ 表示,组间两两比较采用独立样本 t 检验,计数资料采用 χ^2 检验,以 $P < 0.05$ 为差异有统计学意义。

2 结果

2.1 各组基础资料的比较

中、重度组消化道出血原因中上消化道出血率、吸烟、饮酒史均明显高于轻度组($P < 0.05$)。

表 1 各组基础资料的比较

Table 1 Comparison of the basic data between different groups

	Mild group(86)	Moderate group(90)	Severe group(132)
年龄 Age	61.74± 13.48	62.67± 9.7	63.48± 11.51
上 / 下消化道出血 Upper/lower gastrointestinal bleeding	53/33	70/20 ^a	101/31 ^a
吸烟史 Smoking(%)	11(12.79)	41(45.56) ^a	52(39.39) ^a
饮酒史 Drinking(%)	12(13.95)	35(38.89) ^a	45(34.09) ^a
高血压病史 high blood pressure(%)	21(24.42)	27(30.00)	56(42.42)
糖尿病病史 Diabetes mellitus(%)	17(19.77)	16(17.78)	43(32.58)
冠心病病史 Coronary heart disease(%)	15(17.44)	17(18.89)	44(33.33)
脑血管病病史 Cerebral vascular disease(%)	16(18.61)	28(31.11)	28(21.21)

注:与轻度组比较 $P < 0.05$ 。

Note: compared with the mild group.

2.2 各组各项生化指标的比较

与轻度组比较,中、重度组 Blatchford 评分、心率、凝血酶原时间、INR、血肌酐、尿素、血糖均明显升高($P < 0.05$),收缩压、

舒张压、红细胞、血红蛋白、总蛋白、白蛋白、总胆固醇均明显减低($P < 0.05$)。

表 2 各组 Blatchford 评分、生命体征及各项生化指标的比较($\bar{x} \pm s$)

Table 2 Comparison of the blatchford score, vital sign and biochemical indicator between different groups($\bar{x} \pm s$)

	Mild group(86)	Moderate group(90)	Severe group(132)
Blatchford score	3.28± 2.6	9.49± 2.9 ^a	10.77± 2.7 ^{ab}
SBP(mmHg)	131.29± 22.6	120.1± 21.5 ^a	117.71± 19.95 ^a
DBP(mmHg)	80.02± 12.4	74.2± 12.1 ^a	67.79± 12.03 ^{ab}
HR(次 / 分)	81.2± 7.35	84.9± 8.68 ^a	88.02± 10.39 ^a
WBC($\times 10^9/L$)	7.68± 3.48	7.59± 3.50	7.62± 4.28
RBC($\times 10^{12}/L$)	4.1± 0.53	2.87± 0.49 ^a	2.19± 0.58 ^{ab}
HB(g/L)	123.19± 18.12	84.53± 8.31 ^a	59.62± 13.29 ^{ab}
PLT($\times 10^9/L$)	191.81± 75.35	179.13± 101.41	179.31± 104.33
PT(second)	12.5± 2.31	14.78± 4.07 ^a	14.56± 2.49 ^a
INR	0.96± 0.19	1.18± 0.47 ^a	1.15± 0.25 ^a
TBIL($\mu\text{mol/L}$)	24.44± 55.93	28.69± 46.43	21.03± 40.77
DBIL($\mu\text{mol/L}$)	14.25± 44.38	17.73± 40.90	12.06± 28.77
ALT(U/L)	26.66± 21.35	31.23± 43.31	27.02± 28.97
AST(U/L)	24.85± 17.82	45.93± 57.19 ^a	37.74± 49.07
ALP(U/L)	76.04± 50.84	110.38± 193.53	94.99± 110.23
GGT(U/L)	52.14± 82.14	95.75± 179.55	69.13± 105.90
TBA($\mu\text{mol/L}$)	5.06± 7.88	15.36± 42.37	7.55± 13.46

TB(g/L)	66.07± 7.24	55.42± 8.41 ^a	56.01± 14.93 ^a
ALB(g/L)	40.41± 6.91	34.18± 7.08 ^a	30.42± 6.91 ^{ab}
Cr(μmol/L)	66.07± 19.05	81.32± 51.07	155.45± 318.89 ^{ab}
BUN(mmol/L)	5.97± 1.88	9.37± 7.89 ^a	11.95± 9.96 ^a
FBG(mmol/L)	5.97± 2.25	7.74± 4.98	7.36± 3.36 ^a
TC(mmol/L)	4.57± 1.73	4.09± 1.48	2.91± 0.91 ^{ab}

注:与轻度组比较 aP<0.05,与中度组比较 bP<0.05;1mmHg=1.33kPa。SBP=收缩压;DBP=舒张压;HR=心率;WBC=白细胞计数;RBC=红细胞计数;HB=血红蛋白;PLT=血小板;PT=凝血酶原时间;INR=国际标准化比值;TBIL=总胆红素;DBIL=直接胆红素;ALT=谷丙转氨酶;AST=门冬氨酸氨基转移酶;ALP=碱性磷酸酶;GGT=γ-谷氨酰转肽酶;TBA=总胆汁酸;TB=总蛋白;ALB=白蛋白;Cr=血清肌酐;BUN=尿素氮;FBG=空腹血糖;TC=总胆固醇。

Note: Compared with the mild group aP<0.05, compared with the moderate group bP<0.05; 1mmHg=1.33kPa. SBP=Systolic blood pressure; DBP=Diastolic blood pressure; HR=Heart rate; WBC=White blood cell; RBC=Red blood cell; HB=Hemoglobin; PLT=Platelet; PT=Prothrombin time; INR=International normalized ratio; TBIL=Total bilirubin; DBIL=Direct bilirubin; ALT=Alanine aminotransferase; AST=Aspartate aminotransferase; ALP=Alkaline phosphatase; GGT=Gamma glutamyl transpeptidase; TBA=Total bile acid; TP=Total protein; ALB=Albumin; Cr=Serum creatinine; BUN=Urea nitrogen; FBG=Fasting blood glucose; TC=Total cholesterol.

2.3 各组消化道出血病因构成的比较

上消化道出血的病因分布:消化性溃疡最常见,为76例,其中十二指肠溃疡34例,胃溃疡30例,复合性溃疡8例,吻合口溃疡4例;食管胃底静脉曲张75例;急性胃粘膜病变31例;其余贲门撕裂5例,食道癌6例,十二指肠乳头癌5例,胃癌11例,胃息肉3,胆管癌2例。轻度组上消化道出血以消化性溃疡最为常见,为18例,急性胃粘膜病变11例;中度组以食管胃底静脉曲张最为常见,为30例,重度组以食管胃底静脉曲张最

为常见,为38例,其所占比例均明显高于轻度组(P<0.05)。

下消化道出血的病因分布:结肠癌最常见,为25例,炎症性肠病16例,结肠息肉6例,其余结肠溃疡5例,小肠出血8例,空肠占位5例,直肠癌3例,肛周病变3例,不明原因者23例。轻度组下消化道出血最常见为炎症性肠病14例,所占比例明显低于中、重度组(P<0.05);中度组最常见为结肠癌7例;重度组最常见为结肠癌13例。

表3 各组消化道出血的病因构成情况(例数)

Table 3 The causes of gastrointestinal bleeding in each groups

病因 Causes	轻度组 Mild group(86)	中度组 Moderate group(90)	重度组 Severe group(132)	合计 Total(308)
消化性溃疡 Peptic ulcer	18	26	32	76
十二指肠溃疡 Duodenal ulcer	6	14	14	34
胃溃疡 Gastric ulcer	10	6	14	30
复合性溃疡 Compound ulcer	2	4	2	8
吻合口溃疡 Anastomotic ulcer	0	2	2	4
食管胃底静脉曲张 esophagogastric varices	7	30a	38a	75
急性胃粘膜病变 Acute gastric mucosal lesion	11	2a	18b	31
贲门撕裂 Mallory-Weiss Syndrome	4	1	0	5
食道癌 Cancer of the esophagus	2	2	2	6
十二指肠乳头癌 Duodenal papillary carcinoma	2	0	3	5
胃癌 Gastric cancer	5	2	4	11
胃息肉 Gastric polyp	2	1	0	3
胆管癌 holangiocarcinoma	1	0	1	2
结肠癌 Colon cancer	5	7	13	25

炎症性肠病 Inflammatory bowel disease	14	1a	1a	16
结肠息肉 Colon polyp	3	1	2	6
结肠溃疡 Colonic ulcer	2	3	0	5
小肠出血 Enteric hemorrhage	2	4	2	8
空肠占位空肠占位 Jejunal occupation	0	1	4	5
直肠癌 Rectal cancer	2	1	0	3
肛周病变 Perianal lesions	0	1	2	3
不明原因 Unknown causes	6	7	10	23

注:与轻度组比较 aP<0.05;与中度组比较 bP<0.05。

Note: Compared with the mild group aP<0.05; compared with the moderate group bP<0.05.

2.4 消化道出血治疗方式的构成情况

上消化道出血患者接受了药物治疗,必要时内镜下治疗(内镜下喷洒凝血酶溶液或8%去甲肾上腺素、高频电凝、止血

钳、食管静脉曲张套扎术,食管胃底静脉曲张硬化术,胃底静脉曲张组织粘合胶术)。与轻度组比较,重度组内镜治疗所占比例明显升高(P<0.05)。

表4 消化道出血治疗方式的构成情况(例数)

Table 4 Treatments of gastrointestinal bleeding in each groups

治疗方式 Treatments	轻度组 Mild group(86)	中度组 Moderate group(90)	重度组 Severe group(132)
止血钳 Forceps hamostatic	0	2	2
内镜下药物止血内镜下药物止血 Endoscopic hemostasis	5	1	2
高频电凝 High frequency electric knife	3	1	0
食管静脉曲张套扎术 Esophageal variceal ligation	3	5	12
食管胃底静脉曲张硬化术 Esophageal and gastric varices sclerotherapy	1	3	4
胃底静脉曲张组织粘合胶术胃底 静脉曲张组织粘合胶术 Gastric varices with tissue adhesive	0	6	10
脾切除 Splenectomy	1	1	6
合计 Total	13	19	36 ^a

注:与轻度组比较 aP<0.05。

Note: Compared with the mild group aP<0.05.

3 讨论

消化道出血是消化内科常见的急危重症疾病,其病因复杂多样^[7,8],可因消化道本身的炎症、机械性损伤、血管病变、肿瘤等因素引起,也可因邻近器官的病变和全身性疾病累及消化道所致^[9,10]。不同原因的消化道出血,出血部位及出血量均有差异。本研究回顾性分析了我科收治的消化道出血住院患者,发现出血为中度及重度的患者以上消化道出血为主,病因以食道胃底静脉曲张为主,根据患者出血程度可初步判断患者消化道出血的部位及病因。

本研究选择的308例消化道出血患者中,男女比例为2.90:1,与以往研究相符^[11]。通过对轻、中、重度消化道出血的比较,发现上消化道出血的比例高于下消化道出血,重度组上消

化道出血比例更高,这可能与重度组消化道出血主要病因有关。三组消化道出血的发病年龄及合并的慢性疾病史均无明显统计学差异。

在消化道出血的患者中,轻度的出血可引起红细胞、血红蛋白的下降,出血严重时可引起低血容量型休克。大量丢失血液、血浆可表现为心率上升、血压下降,红细胞及血红蛋白明显下降、总蛋白及白蛋白下降等。在消化道大出血后,由于大量血液中蛋白质的分解产物在消化道中被吸收,血中尿素氮指标会明显升高。又由于血容量减低、内环境紊乱可造成肾前性急性肾脏功能不全,引起血清肌酐升高。Blatchford评分以血压、尿素氮、血红蛋白、临床症状等相关临床信息进行评分,目前已在临床消化道出血程度的评估中得到认可^[12,13]。因此,Blatchford评分在轻度出血患者中较低,在重度患者中较高。重度组消化

道出血患者的凝血酶原时间与 INR 均较轻度组增高,可能与本研究中、重度消化道出血患者多因肝硬化、门脉高压引起的食管胃底静脉曲张破裂出血有关。肝硬化的患者通常有凝血功能障碍,主要表现为凝血酶原时间延长,INR 增高^[14]。

本研究诊断的消化道出血的病因中,最常见为消化性溃疡(76 例),占 24.68%;其次为食管胃底静脉曲张 75 例,占 24.35%;急性胃粘膜病变 31 例第三位,占 10.06%。与以往的报道相比,消化性溃疡为消化道出血的主要病因,以十二指肠溃疡最多见^[15-17]。本研究中,消化性溃疡和食管胃底静脉曲张在消化道出血中所占比例几乎相等,这与我科积极开展内镜下治疗有关。中、重度组食管胃底静脉曲张比例较轻度组多,差异有统计学意义,可能与病变所累积的血管大小及血管内的压力有关。急性胃粘膜病变的发病已居第三位。近年来,随着人口老龄化,心脑血管发病率增加,非甾体类抗炎药的广泛应用,以及社会进步发展,工作压力增大,饮食不规律,大量饮酒及肝炎患者的增多,急性胃黏膜病变及食管静脉曲张破裂所致的出血有增多趋势。而胃癌所致消化道出血的发病率呈下降趋势,这可能与人们对健康状况的日益关注以及内镜检查的普及,使疾病能早期发现与诊断有关。结肠肿瘤和息肉是下消化道出血的主要原因,其次是炎症性肠病^[18,19]。本研究结果表明炎症性肠病多以消化道轻度出血为表现。大部分消化道出血经胃镜和(或)结肠镜检查均能明确病因,但仍有 5%~10%患者无法确定原因^[9]。本研究有 23 例患者出血原因不明,占 7.47%,与以往研究相符^[11]。

随着出血程度的加重,治疗方式也有所改变,内镜下治疗比例呈明显上升趋势^[11]。我科于 2000 年开展内镜下治疗以来,内镜下喷洒凝血酶溶液或 8%去甲肾上腺素、高频电凝、止血钳、食管静脉曲张套扎术,食管胃底静脉曲张硬化术,胃底静脉曲张组织粘合胶术等均已在我科开展。近几年收治的食道胃底静脉曲张患者逐渐增多,严重消化道出血患者内镜下治疗效果明显,这可能与本研究重度组中食管胃底静脉曲张病因比例及内镜下治疗所占比例较高有关。

早期进行内镜检查是上消化道出血病因诊断最有效的手段,并能在内镜下行止血治疗^[20]。通过出血程度可快速评估病变部位及病因,以采取相应治疗措施。本研究通过消化道出血程度对出血部位及病因做出初步评估,为其病因的早期预测提供理论依据,对于临床工作具有一定的指导意义。

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