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胃大部切除术后消化性溃疡患者残胃癌危险因素分析及其干预措施 *

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摘要 目的:探究消化性溃疡患者胃大部切除术后发生残胃癌的危险因素,并提出相应干预措施。方法:选取我院收治的行胃大部切除术治疗后的消化性溃疡患者180例作为研究对象,将其随机分为两组,每组90例。对照组给予常规干预,观察组给予综合干预,观察两组的干预效果,同时将发生残胃癌患者与未发生残胃癌患者各项资料进行对比,分析影响残胃癌发生的危险因素。结果:观察组中没有患者发生残胃癌,对照组中有10例患者发生残胃癌,发生率为11.11%,显著高于观察组($P<0.05$);两组患者在首次手术年龄、性别、HP感染上进行对比差异无统计学意义($P>0.05$);两组患者在首次手术吻合方式、首次手术溃疡位置上对比具有统计学意义($P<0.05$),残胃癌组采用毕I式2例,毕II式7例,Roux-Y式1例;未发生残胃癌组采用毕I式82例,毕II式74例,Roux-Y式14例,残胃癌组首次手术溃疡位置以十二指肠球部为主,未发生残胃癌组以十二指肠球部、胃体部为主;Logistics回归分析结果证实首次手术吻合方式、首次手术溃疡位置属于残胃癌发生的主要危险因素。结论:术后残胃癌发生危险因素包括首次手术吻合方式、首次手术溃疡位置,同时相关并发症的发生同样会增加术后残胃癌发生风险,应加强引流管干预、并发症干预,并将此作为基础制定综合干预方案。

关键词: 胃大部切除术;消化性溃疡;残胃癌;危险因素

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Analysis of the Risk Factors Causing Gastric Stump Cancer for Peptic Ulcer Patients after Accepting Subtotal Gastrectomy as Well as Related Intervention Measures*

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ABSTRACT Objective: To analyze the risk factors for gastric stump cancer of peptic ulcer patients after accepting the subtotal gastrectomy and propose corresponding intervention measures. **Methods:** 180 patients with peptic ulcer disease after accepting the subtotal gastrectomy and randomly were divided into 2 groups. Provide the regular intervention for the control group and provide comprehensive intervention for observation group to observe the intervention effects. Compare each detail information of patient with gastric stump cancer with that of patient without gastric stump cancer to observe the risk factors causing gastric stump cancer. **Results:** There were no cases of gastric stump cancer in the observation group and 10 cases in the control group (11.11%, $P<0.05$), and there was no significant difference in the age and sex of HP infection between the two groups ($P>0.05$). There were significant differences between the two groups in the anastomosis of the first operation and the location of ulcer in the first operation ($P<0.05$). In the gastric stump gastric cancer group, there were 2 cases of type I and 1 case of type II Roux-Y, and 82 cases of type I were used in the group without residual gastric cancer. A report of 74 cases of Bi II type Roux-Y type 14 In the gastric stump group, duodenal bulbar was the main location of ulcer in the first operation, and the duodenal bulbar and gastric body were the main anastomosis in the gastric remnant group. The results of logistic regression analysis confirmed the anastomosis of the first operation. The location of ulcer in the first operation is the main risk factor of gastric stump cancer. **Conclusion:** The risk factors that may cause gastric stump cancer after surgery include the surgical anastomosis kinds and surgical ulcer position of the first surgery. Meanwhile, the incidence of related complications will also increase the gastric stump cancer incidence rate. Therefore, the comprehensive intervention plan, including strengthening drainage tube intervention and complications intervention, shall be established based on this.

Key words: Subtotal gastrectomy; Peptic ulcer; Gastric stump cancer; Risk factors

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前言

胃大部分切除术是应用在胃十二指肠溃疡与胃肿瘤等疾病上的一种外科手术,其优势在于胃体可切除较多、溃疡复发率较低等,但基于其操作较为复杂且术后生理改变较多,可能会引发相关并发症^[1,2]。有研究者提出胃部分切除术治疗后,患者胃黏膜的保护功能会有所减弱,而吻合口反流会导致胃内低酸环境,这一系列反应可能会引发残胃癌^[3,4]。目前,消化性溃疡患者行大部分切除术治疗后发生残胃癌的具体机制尚不完全明确,但大量临床研究结果显示与术后胃内环境转变与碱性十二指肠液反流存在相关性^[5,6]。消化性溃疡患者行胃大部分切除术治疗后,残胃癌的高发时间处于10-20年。基于残胃癌发生时间的节点特征,为控制术后残胃癌的发生率,有必要加强对患者的术后随访,关注患者是否出现消化道症状,一旦发生则必须要警惕残胃癌发生可能性,建议患者尽早接受消化道内镜检查,避免延误最佳治疗时机。本次研究选取180例行胃大部分切除术治疗患者进行对比观察,旨在探究残胃癌危险因素及相应的干预措施,现将结果报道如下。

1 资料与方法

1.1 一般资料

选取我院2012年1月~2013年1月收治的180例行胃大部分切除术治疗的消化性溃疡患者作为研究对象,将其依据随机抽样原则分为观察组与对照组,两组分别90例患者。观察组中,男49例,女41例,年龄47岁~68岁,平均年龄(57.29±8.59)岁。对照组中,男48例,女42例,年龄46岁~68岁,平均年龄(56.57±8.27)岁。纳入标准:在本院接受胃大部分切除术;本次研究获取伦理委员会及患者同意。排除标准:伴随其他重大消化系统疾病者;临床病历资料不全者。两组患者年龄与性别分布比较差异均无统计学意义,具有可比性。

1.2 方法

1.2.1 调查方法 采集患者一般资料(年龄、性别、等),同时统计患者初次手术吻合方式、HP感染等信息,行胃大部分切除术后对患者随访5年,将发生残胃癌患者与未发生残胃癌患者各项信息进行对比,分析残胃癌的危险因素。

1.2.2 干预方法 对照组:对照组在患者住院期间给予常规干预,包括密切观察患者生命体征变化情况、实施必要健康教育、给予康复指导等,在出院后定期电话随访^[9,10]。

观察组:观察组在患者住院期间给予综合干预,具体如下:

(1)常规监护:在术后患者苏醒后,转到病房,术后6h内安装监护仪,半小时测量一次生命体征与SPO₂,在患者病情稳定后转为1h测量一次,正常情况观察12h^[11,12]。

(2)引流管干预:术后患者需要置入围兜,在排除电解质紊乱的情况下需要维持患者胃肠减压,预防或减缓腹胀情况,同时控制残胃扩张与消化液外漏等情况的发生。术后24-48h,在胃管引流不畅或患者自诉腹胀时,间隔2-3h利用30mL空针缓慢抽吸一次,若出现阻力则尝试改变患者体位,避免操作导致胃肠黏膜受到损伤^[13,14]。

(3)并发症干预:术后常见并发症包括出血与感染等,针对出血常规给予止血剂或输血,若效果不理想则再次手术止血;

针对感染,加强病房卫生情况管理,同时维持切口周围皮肤清洁程度,及时更换敷料,若发生红肿或疼痛,需要及时进行细菌培养与药敏试验,调整抗生素等^[15,16]。

1.3 观察指标

分别对比观察两组患者的随访结果,主要内容为是否发生残胃癌,同时对发生残胃癌患者与未发生残胃癌患者的各项临床资料进行对比观察。

1.4 统计学处理

所有数据均采用SPSS17.0统计软件进行处理,计量资料采用均数±标准差($\bar{x} \pm s$)表示,两组间比较采用t检验,计数资料采用率(%)表示,两组间比较采用 χ^2 检验,以 $P < 0.05$ 表示差异具有统计学意义。

2 结果

2.1 两组患者残胃癌发生率对比

观察组90例患者中没有患者发生残胃癌,发生率为0%;对照组90例患者中有10例患者发生残胃癌,发生率为11.11%,较观察组显著升高,组间对比差异具有统计学意义($P < 0.05$)。

2.2 两组患者并发症发生率对比

如图1所示,观察组90例患者中仅有1例出现出血情况,并发症发生率为1.11%;对照组90例患者中,有8例患者分别发生出血、感染、吻合口狭窄情况,并发症发生率为8.89%,显著高于观察组,组间对比差异具有统计学意义($P < 0.05$)。

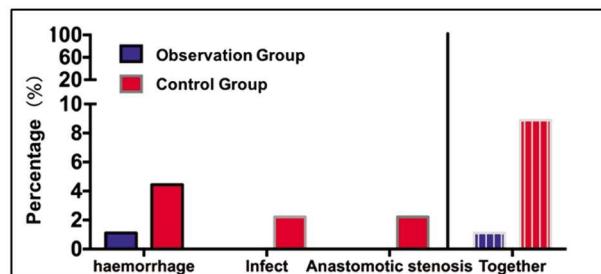


图1 两组患者并发症发生率对比图

Fig.1 Comparison of complications between two groups

2.3 发生与未发生残胃癌患者的临床特征对比

如表1所示,两组患者在首次手术年龄、性别、HP感染上进行对比差异无统计学意义($P > 0.05$);两组患者在首次手术吻合方式、首次手术溃疡位置上对比具有统计学意义($P < 0.05$),残胃癌组采用毕I式2例,毕II式7例,Roux-Y式1例;未发生残胃癌组采用毕I式82例,毕II式74例,Roux-Y式14例,残胃癌组首次手术溃疡位置以十二指肠球部为主,未发生残胃癌组以十二指肠球部、胃体部为主。

2.4 残胃癌发生危险因素 Logistics 回归分析

如表2所示,Logistics回归分析结果证实首次手术吻合方式、首次手术溃疡位置属于残胃癌发生的主要危险因素。

3 讨论

以往有部分学者提出胃大部分切除术后发生残胃癌的主要影响因素为胃黏膜细胞营养环境的转变与残胃过大^[17,18]。本

研究分别对发生残胃癌与未发生残胃癌患者的各项临床资料进行了对比,发现两组患者在首次手术吻合方式、首次手术溃疡位置对比差异具有统计学意义,首次手术吻合方式、首次手术溃疡位置属于残胃癌发生的主要危险因素,与以往部分研究

资料较为一致。这些结果进一步证实了针对行胃大部分切除术治疗后的消化性溃疡患者,需要在首次手术吻合方式即手术溃疡位置危险因素加以关注,做好评估工作,借助于有效手段降低术后残胃癌发生率^[19-21]。

表 1 发生与未发生残胃癌患者临床特征对比结果[$\bar{x} \pm s$]Table 1 Comparison of clinical characteristics of patients with and without residual gastric cancer[$\bar{x} \pm s$]

Items	Gastric stump cancer group(n=10)	No gastric stump group (n=170)	t/χ^2	P
Age of first operation (years)	53.26± 3.26	52.18± 3.16	1.526	0.854
The male sex	6(60.00)	97(57.06)	1.624	0.754
First surgical anastomosis			10.354	0.013
Billroth's I	2	82		
Billroth's II	7	74		
Roux-Y	1	14		
Location of ulcer in first operation			12.054	0.001
Duodenal bulb	6	85		
Body of stomach	2	74		
Gastric antrum	1	6		
Complex ulcer	1	5		
HP infection	2	40	2.541	0.947

表 2 残胃癌危险因素 Logistic 回归分析

Table 2 Logistic regression analysis of risk factors for residual gastric cancer

Factor	β	SE	OR	95%CI	P
First surgical anastomosis	-1.25	0.28	3.16	2.22-4.28	0.025
Location of ulcer in first operation	1.06	0.40	2.45	1.68-4.08	0.013

吻合口属于残胃癌的多发部位,其主要原因在于术后十二指肠反流,毕Ⅱ式吻合术会进一步增加术后含胆汁与胰液的十二指肠液返流发生风险,从而转变胃内酸性环境,导致患者术后胃黏膜原有保护功能有所弱化,促进残胃的癌变^[22-24]。本研究中,发生残胃癌组患者的十二指肠溃疡发生率明显高于未发生组,主要原因便是首次手术吻合方式选择的不同^[25-27]。同时,十二指肠球部溃疡手术多会进行远端胃的大部分切除,会增加十二指肠返流发生可能性,进一步增加残胃癌风险。本次研究虽然没有证实发生与未发生残胃癌患者之间自诉返流症状存在统计学意义,但两组患者中存在部分患者并没有接受此症状评估,因而不能明确术后返流对残胃癌的发生没有影响^[28-29]。另外,以往有研究资料显示 HP 感染属于胃大部分切除术后残胃癌发生的危险因素之一,而本次研究中发生与未发生残胃癌组患者在 HP 感染情况上对比并无统计学意义,此结果与以往研究资料存在一定差异^[30]。

本研究中,观察组并没有患者发生残胃癌,仅有 1 例出现出血情况,并发症发生率为 1.11%,对照组残胃癌发生率为 11.11%,有 8 例患者分别发生出血、感染、吻合口狭窄情况,并发症发生率为 8.89%。此结果表明加强护理干预不仅有助于控制相关并发症的发生,更为重要的是对于防控残胃癌具有重要意义,应作为防控术后残胃癌发生的主要手段。从两组干预

措施来看,观察组分别加强了引流干预、相关并发症干预等几项干预措施;从随访结果来看,观察组所加强的干预措施切实发挥出控制并发症及术后残胃癌发生率的效果。首先,就引流干预措施来讲,胃大部分切除术后,患者需要置入引流管及胃管等,引流管所出现堵塞或脱出等情况,会导致逆流的发生,增加术后感染风险,而感染对于术后残胃癌的发生具有一定影响作用。为此,加强引流管管理能够间接控制残胃癌的发生;术后置入胃管过程中患者多会发生腹胀或是电解质紊乱情况,而加强胃管管理能够有效降低各种不良现象的发生,从而达到降低术后并发症的效果。其次,就相关并发症干预手段而言,胃大部分切除术后患者比较容易发生的并发症包括出血、吻合口狭窄、感染,并发症是导致残胃出现癌变发展的主要原因。因此,加强并发症干预同样有助于控制术后残胃癌的发生。

此外,还应加强对患者的饮食干预、心理干预。首先,正常情况下术后 2-3 d 患者肠蠕动逐渐恢复后可早期拔除胃管,可能导致患者少量饮用温水,若患者没有发生不良反应,可在术后前 3 d 给予少量流食,摄入量缓慢增加,若观察无异常情况,可在术后第 4 d 给予少量半流食。值得注意的是,胃大部分切除后患者的饮食对于术后康复具有重要影响,在单次饮食量上必须要谨慎控制,可多餐少食。其次,就心理干预而言,心理状态与生理变化存在一定关联,而肠胃反应与患者自信心理状态相

关性更为明显,护理人员应指导患者家属参与到心理干预实施中,对患者给予鼓励,促使其能够增强康复信心,同时维持良好心理状态,有助于术后康复效果。另外,加强出院指导对控制术后残胃癌的发生同样具有重要意义,在患者出院前应对患者及其家属进行注意事项讲解,包括康复训练、相关并发症预防等,其中关键内容为对术后残胃癌发生的识别与预防,残胃癌早期症状与溃疡较为相似,这是导致此病症被误诊或漏诊的主要原因。因此,必须要指导患者若发现消化道病症需要及时到医院进行检查,排除残胃癌,做到及时发现及时治疗。

综上所述,胃大部分切除术操作较为复杂且术后生理改变较多,术后可能会发生残胃癌,术后残胃癌发生危险因素包括首次手术吻合方式、首次手术溃疡位置,同时相关并发症的发生同样会增加术后残胃癌发生风险。因此,应将此作为基础制定综合干预方案,包括加强引流管干预、并发症干预等,以利于降低术后残胃癌的发生率。

参考文献(References)

- [1] Kim YM, Son T, Kim HI, et al. Robotic D2 Lymph Node Dissection During Distal Subtotal Gastrectomy for Gastric Cancer: Toward Procedural Standardization[J]. Annals of surgical oncology, 2016, 23(8): 2409-2410
- [2] Ji X, Yan Y, Bu ZD, et al. The optimal extent of gastrectomy for middle-third gastric cancer: distal subtotal gastrectomy is superior to total gastrectomy in short-term effect without sacrificing long-term survival[J]. BMC cancer, 2017, 17(1): 345
- [3] Oh HJ, Choi MG, Park JM, et al. Acid Secretion and Its Relationship to Esophageal Reflux Symptom in Patients with Subtotal Gastrectomy [J]. Digestive diseases and sciences, 2018, 63(3): 703-712
- [4] Yang L, Wu J, Li T. The application of nalfurphine in patient-controlled intravenous analgesia for patients undergoing subtotal gastrectomy [J]. Experimental & therapeutic medicine, 2018, 15 (2): 1910-1913
- [5] Gottret P, Gupta V, Sparkes S, et al. Protecting pro-poor health services during financial crises: lessons from experience [J]. Adv Health Econ Health Serv Res, 2009, 21(3): 23-53
- [6] Wang N, Ou Yn, Qing W. Combined acupuncture and general anesthesia on immune and cognitive function in elderly patients following subtotal gastrectomy for gastric cancer [J]. Oncology letters, 2018, 15 (1): 189-194
- [7] Chen CH, Lin CL, Cheng YS, et al. Association Between Subtotal Gastrectomy with Billroth II Anastomosis and Coronary Heart Disease[J]. Obesity surgery, 2017, 27(6): 1604-1611
- [8] Olmi S, Giorgi R, Cioffi SPB, et al. Total and Subtotal Laparoscopic Gastrectomy for the Treatment of Advanced Gastric Cancer: Morbidity and Oncological Outcomes [J]. Journal of laparoendoscopic & advanced surgical techniques, 2018, 28(3): 278-285
- [9] Arer IM, Yabanoglu H, Akdur A, et al. Total Versus Subtotal Gastrectomy for Signet Ring Cell Carcinoma of the Stomach [J]. Journal of the College of Physicians and Surgeons Pakistan, 2017, 27(10): 616-620
- [10] Morgagni P, Gardini A, Marrelli D, et al. Gastric stump carcinoma after distal subtotal gastrectomy for early gastric cancer: experience of 541 patients with long-term follow-up [J]. The American Journal of Surgery, 2015, 209(6): 1063-1068
- [11] Chen YS, Wu SD, Kong J, et al. Transumbilical single-incision laparoscopic subtotal gastrectomy and total intracorporeal reconstruction of the digestive tract in the treatment of benign peptic ulcers[J]. Journal of Surgical Research, 2014, 192(2): 421-425
- [12] Kwon Y, Abdemur A, Lo Menzo E, et al. The foregut theory as a possible mechanism of action for the remission of type 2 diabetes in low body mass index patients undergoing subtotal gastrectomy for gastric cancer [J]. Surgery for Obesity and Related Diseases, 2014, 10 (2): 235-242
- [13] Furukawa H, Kurokawa Y, Takiguchi S, et al. Short-term outcomes and nutritional status after laparoscopic subtotal gastrectomy with a very small remnant stomach for cStage I proximal gastric carcinoma [J]. Gastric Cancer, 2018, 21(3): 500-507
- [14] Hamashima C. Current issues and future perspectives of gastric cancer screening [J]. World J Gastroenterol, 2014, 20(38): 13767-13774
- [15] Yu P, Wang H, Mu L, et al. Effect of general anesthesia on serum β -amyloid protein and regionalcerebral oxygen saturation of elderly patients after subtotal gastrectomy [J]. Experimental and Therapeutic Medicine, 2016, 12(6): 3561-3566
- [16] Sun YS, Ye ZY, Zhang Q, et al. Beneficial effects of continual jejunal interposition after subtotal gastrectomy [J]. Chinese Medical Journal, 2012, 125(16): 2846-2852
- [17] Oh HJ, Choi MG, Park JM, et al. Acid Secretion and Its Relationship to Esophageal Reflux Symptom in Patients with Subtotal Gastrectomy [J]. Digestive Diseases & Sciences, 2018, 63(3): 703-712
- [18] Yang L, Wu J, Li T. The application of nalfurphine in patient-controlled intravenous analgesia for patients undergoing subtotal gastrectomy [J]. Experimental & Therapeutic Medicine, 2018, 15 (2): 1910-1913
- [19] Lee JH, Son T, Kim J, et al. Intracorporeal delta-shaped gastroduodenostomy in reduced-port robotic distal subtotal gastrectomy: technical aspects and short-term outcomes[J]. Surgical Endoscopy, 2018, 04 (07): 19
- [20] Zhou J. Repair of Gastric Perforation and Subtotal Gastrectomy[J]. Medical Information, 2018, 06(08): 47
- [21] Marchesi F, De Sario G, Cecchini S, et al. Laparoscopic subtotal gastrectomy for the treatment of advanced gastric cancer: a comparison with open procedure at the beginning of the learning curve [J]. Acta Biomed, 2017, 88(3): 302-309
- [22] Irino T, Hiki N, Nunobe S, et al. Subtotal gastrectomy with limited lymph node dissection is a feasible treatment option for patients with early gastric stump cancer [J]. J Gastrointest Surg, 2014, 18 (8): 1429-1433
- [23] Hsu CC, Almulaifi A, Chen JC, et al. Effect of Bariatric Surgery vs Medical Treatment on Type 2 Diabetes in Patients With Body Mass Index Lower Than 35: Five-Year Outcomes [J]. JAMA Surg, 2015, 150(12): 1117-1124
- [24] Sun LB, Zhao GJ, Ding DY, et al. Comparison between better and poorly differentiated locally advanced gastric cancer in preoperative chemotherapy: a retrospective, comparative study at a single tertiary care institute[J]. World J Surg Oncol, 2014, 12(2): 280
- [25] Woo J, Lee JH, Lee K E, et al. Gastric Metastasis as the First Presentation One Year Before Diagnosis of Primary Breast Cancer[J]. American Journal of Case Reports, 2018, 19(04): 354-359

(下转第 2903 页)

- [14] Kaya B, Guralp O, Tuten A, et al. Which uterine sparing technique should be used for uterine atony during cesarean section? The Bakri balloon or the B-Lynch suture?[J]. Archives of Gynecology & Obstetrics, 2016, 294(3): 511-517
- [15] Nishikawa A, Matsuzaki S, Mimura K, et al. Short interpregnancy interval after B-Lynch uterine compression suture: a case report[J]. Clin Exp Obstet Gynecol, 2016, 43(3): 434-436
- [16] O'Neill S M, Curran E A, Dalman C, et al. Birth by Caesarean Section and the Risk of Adult Psychosis: A Population-Based Cohort Study[J]. Schizophrenia Bulletin, 2016, 42(3): 633-641
- [17] Heemelaar S, Nelissen E, Mdoe P, et al. Criteria-based audit of caesarean section in a referral hospital in rural Tanzania [J]. Tropical Medicine & International Health, 2016, 21(4): 525-534
- [18] Robson S J, de Costa C M. Thirty years of the World Health Organization's target caesarean section rate: time to move on [J]. Medical Journal of Australia, 2017, 206(4): 181-185
- [19] Yang F, Huang S, Long Y, et al. Double-balloon versus single-balloon catheter for cervical ripening and labor induction: A systematic review and meta-analysis [J]. Journal of Obstetrics & Gynaecology Research, 2017, 44(1): 27-34
- [20] Umit A, Filiz A. Diagnostic and Therapeutic Capability of Double-Balloon Enteroscopy in Clinical Practice [J]. Clinical Endoscopy, 2016, 49(2): 157-160
- [21] Vijayasree M. Efficacy of Prophylactic B-Lynch Suture during Lower Segment Caesarian Section in High Risk Patients for Atonic Postpartum Haemorrhage[J]. Kathmandu Univ Med J, 2016, 14(53): 9-12
- [22] Matsubara S. Bakri balloon vs. B-Lynch suture as hemostatic procedures for atonic bleeding: clarification and concerns [J]. Archives of Gynecology & Obstetrics, 2016, 293(5): 1-2
- [23] Abbas A M, Sheha A M, Ali M K, et al. Successful term delivery after Khairy's modified B-lynch suture technique: First case report[J]. Middle East Fertility Society Journal, 2017, 22(1): 87-90
- [24] Tang L, Huang L Y, Cui J, et al. Effect of Double-Balloon Enteroscopy on Diagnosis and Treatment of Small-Bowel Diseases[J]. Chin Med J, 2018, 131(11): 1321-1326
- [25] Yamamoto H. Fifteen years since the advent of double-balloon endoscopy [J]. Clinical Gastroenterology & Hepatology the Official Clinical Practice Journal of the American Gastroenterological Association, 2017, 15(11): 1647-1650
- [26] Jamil L H. Migrated esophageal stent retrieved via oral double-balloon enteroscopy[J]. Gastrointestinal Endoscopy, 2017, 2(3): 62-63
- [27] Indiran V, Kannan K, Maduraimuthu P. CT and MR imaging of uterine necrosis following B-Lynch and Hayman suturing for postpartum hemorrhage [J]. Indian Journal of Medical Specialities, 2016, 7(3): 125-126
- [28] Smithers L G, Mol B W, Wilkinson C, et al. Implications of caesarean section for children's school achievement: A population-based study[J]. Aust N Z J Obstet Gynaecol, 2016, 56(4): 374-380
- [29] Arab M, Ghavami B, Saraeian S, et al. Successful Management of Two Cases of Placenta Accreta and a Literature Review: Use of the B-Lynch Suture and Bilateral Uterine Artery Ligation Procedures[J]. Iranian Red Crescent Medical Journal, 2016, 18(4): e35006
- [30] Harlow F H, Smith R P, Nortje J, et al. Catastrophic uterine rupture associated with placenta accreta after previous B-Lynch sutures [J]. Journal of Obstetrics & Gynaecology the Journal of the Institute of Obstetrics & Gynaecology, 2017, 38(2): 282-284
- [31] Abbas A M, Sheha A M, Ali M K, et al. Successful term delivery after Khairy's modified B-lynch suture technique: First case report[J]. Middle East Fertility Society Journal, 2017, 22(1): 87-90

(上接第 2872 页)

- [26] Lee HJ, Ock M, Kim K, et al. Estimation of population-based utility weights for gastric cancer-related health states [J]. Patient Preference & Adherence, 2018, 12(14): 909-918
- [27] Wang T, Lu ZY, Tu XF, et al. Computerized tomography findings in calcified signet-ring gastric cancer receiving chemotherapy: a case report[J]. Bmc Cancer, 2018, 18(1): 474
- [28] Frenkel A, Bichovsky Y, Perry Z H, et al. Management of gastros-

- plenic fistula in the emergency setting-A case report and review of the literature[J]. Annals of Medicine & Surgery, 2018, 04(12): 26-29
- [29] Arrangoiz R, Papavasiliou P, Dushkin H, et al. Case report and literature review: Metastatic lobular carcinoma of the breast an unusual presentation[J]. Int J Surg Case Rep, 2011, 2(8): 301-305
- [30] Kim KH, Lee HJ, Lee SH, et al. Mixed adenoneuroendocrine carcinoma in the stomach: a case report with a literature review[J]. Annals of Surgical Treatment & Research, 2018, 94(5): 270-273