· 临床病理讨论 ·

Clincopathological Conference (the 44th case)

Gastrointestinal bleeding caused by repeated hiccups because of calculous cholecystitis

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Case presentation

A male patient, 91 years old, was admitted to Department of Gastroenterology at South Building, Chinese PLA General Hospital on January 7, 2010, because of intermittent vomiting for 1 month with a history of hematemesis.

The patient began to suffer intermittent hiccups accompanied by nausea, vomiting, and diarrhea with unknown causes since the night of December 7, 2009, when he was hospitalized in Department of Geriatric Cardiololgy, Chinese PLA General Hospital. All the vomitus was stomach contents with positive occult blood test. Diarrhea appeared following consumption of little fluid nutrition or rice soup, 3–4 times daily, and fecal occult blood test was positive intermittently. The hiccups were more severe in the daytime and disappeared when the patient fell asleep, which did not respond to ear beans,acupuncture,metoclopramide and methylphenidate (Ritalin). At 11:00 o'clock on December 22, the patient presented with hematemesis, containing bright red blood about 500 ml. Then the electrocardiogram (ECG) monitor showed decrease in blood pressure and ST elevation. Gastric tube feeding, lavage with ice saline, and reptilase, octreotide and omeprazole administration were performed immediately. Then, the hiccups appeared, and his vital signs became stable. But, the fecal occult blood test was still positive. On January 4, 2010, the patient presented with intermittent hiccups again. For further diagnosis and treatment, he was transferred to our department with the diagnosis of gastrointestinal bleeding with unknown origin.

Past history The patient reported previous history of hepatitis, hypertension, type 2 mellitus diabetes,old myocardial infarction, left ventricular apical aneurysm, multiple cerebral infarction and senile dementia, *etc*. The patient ever presented with gastrointestinal bleeding due to hiccups on January 7, 2009, and gastroscopy established the diagnosis of mucosal tear syndrome of the cardia. The patient was hypersensitive to Xin Mai Long (a chinese traditional medicine) injection and denied other drugs and food sensitive history.

Physical examination Body temperature was 36.5℃. No jaundice, rash and hemorrhage were seen on the skin. No superficial lymph node was touched. The breathing sound of both lungs was clear and no obvious rale was heard. His cardiac rhythm was regular at 78 beats per minute. Heart rate changed significantly with body posture shifts. No obvious pathological murmur was heard in the valve auscultation areas. His abdomen was flat and no visible intestinal peristaltic wave was observed.The abdomen was soft with no tenderness, rebound tenderness, and myotonia, and no mass was touched. The liver and spleen were not touched below the costal margin. Murphy's sign was negative. The abdominal percussion sounded like drum. The shifting dullness was negative, and the bowel sounds were about 5-6 times per minute. There was no edema of legs. The dorsalis pedis arterial pulses was weakened.

Accessory examination Blood routine test on January 5, 2010 showed that platelets(PLT) were 94 × 10^9/L, white blood cells (WBC) 4.794×10^9/ L, neutrophil granulocytes 0.664, and hemoglobin (HGB) 102 g/L. The blood biochemical test showed that γ-glutamyl transpeptidase (γ-GT) was 221 U/L, total bilirubin (TBIL) 17.8 μmol/L, and direct bilirubin (DBIL) 13.53 μmol/L. Coagulation function test showed that prothrombin time (PT), activated partial thromboplatin time (APTT) and International Normalized Ratio (INR) were normal.

Admisstion diagnosis (1) Upper gastrointestinal bleeding with unknown origin (mucosal tear syndrome of the cardiac or duodenal wall lesions?). (2) Coronary heart disease with old myocardial infarction and aneurysm. (3) Grade 3 hypertension (extremely high risk). (4) Sick sinus syndrome, tachy-brady syndrome. (5) Chronic bronchitis, obstructive pulmonary disease. (6) Type 2 mellitus diabetes. (7) Alzheimer's disease (AD). (8)Old cerebral infarction. (9)Multiple colon polyps. (10) Sleep apnea syndrome.

The gastrointestinal bleeding was possibly due to the mucosal tear syndrome of the cardia caused by hiccups. Reexamination revealed that fecal occult blood test was negative and there was no signs of active bleeding.So we gave the patient a small amount of rice soup through stomach tube. The patient still had intermittent hiccups, which was aggravated after meal consumption. The

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hiccups lasted for 1–2 hours generally and stopped by itself. There were no hiccups occurring when the patient fell asleep. On January 11, 2010, the patient vomited after consuming some rice soup, and all the vomitus was stomach contents.Then he got a fever and the highest temperature was up to 38.4℃. The patient was again subjected to routine blood test: WBC 12.72×10^9/L, neutrophil granulocytes 0.858; and the biochemical test: γ-GT 227 U/L, ALP 148 U/L, T-BIL 27.5 μmol/L, D-BIL 14.87 μmol/L. So anti-infection treatment was given to the patient. On the next day, physical examination showed tenderness at right upper quadrant without rebound tenderness,muscle tension and mass. Abdominal ultrasound and CT both showed calculus incarceration at the neck of gallbladder and a large gallbladder with cystic changes in the bottom of exudative but without signs of gallbladder rupture. On January 14, physical examination displayed a mass with apparent tenderness at the abdomen, 2 cm to the right side of ribs. The inflammatory markers continued to rise, indicating hepatobiliary infection, so the anti-infection treatment was strengthened. Hepatobiliary surgeons considerd that the patient's conditions, such as old age, poor cardiac and pulmonary function, complication with aneurysm, and sick sinus syndrome,did not allow him to tolerate surgery. So percutaneous puncture and drainage of gallbladder(PDG) were performed on January 15 and there was about 200 ml viscous bile drainage from gallbladder. Since then, bile drainage was yellow-green viscous and the volume ranged from 20 ml to 50 ml per day. After drainage of biles, temperature and inflammatory markers soon returned to the normal levels. The hiccups were alleviated. Tenderness at right upper quadrant also disappeared. Bile drainage gradually changed to yellow-white viscous and decreased to 5 ml to 14 ml per day. So we ceased anti-infection treatment on January 29. Considering that the stones still existed, hepatobiliary surgeon consultated the patient data again. And surgical operation was denied because of the great risk. Since February 4, resistance increased when normal saline was infused through drainage tube. But abdominal ultrasound reexamination showed that the size of gallbladder was normal. On February 8, the patient got high fever with chills. Some pus flowed out through the drainage tube and inflammatory markers elevated again. Anti-infection and symptomatic treatment were ineffective. After a hospital consultation, emergency surgery was carried out. Intraoperatively, we found a stone impacted at the ampulla of gallbladder and necrosis of partial gallbladder wall with severe adhesion to surrounding tissue. So partial cholecystectomy, cholelithotomy and cholecystostomy were performed.

Clinical discussion

Dr. WEN Junbao: The patient had a history of repeated hiccups and gastrointestinal bleeding. We consider mucosal tear syndrome of the cardia caused by hiccups as the origin of gastrointestinal bleeding. After admission, calculous cholecystitis was confirmed as the cause of hiccups. And, hiccups soon disappeared after cholecystitis was controlled. This case suggested that hiccups, although a common clinical symptom, deserve great attention, not only on symptom alleviation, but also on its cause. The possibility of organic disorder should also be considered. For an elder patient with calculous cholecystitis, especially accompanied with other disease, it was severely risky for operation. But PDG or anti-infection treatment could not resolve the biliary obstruction completely. So we still should try our best to create the condition for surgical operaion.

***Dr. CHANG Qing*:** The patient had a definite history of vomiting bright red blood and his blood pressure dropped after hematemesis. Fecal occult blood test was positive too. So the diagnosis of gastrointestinal bleeding was confirmed. On January 7, 2009, the patient presented with upper digestive tract bleeding following vomiting. Gastroscopy revealed the mucosal tear of the cardia. The patient had a previous history of intermittent hiccups and concomittent high abdominal pressure and intragastric pressure. Besides, he is 91 years old, and the repair capacity of esophagogastric mucosa was reduced. So the first consideration for the bleeding should be the mucosal tear syndrome of the cardia. After admission, the physical examination and abdominal ultrasound and CT examination established the diagnosis of acute obstructive cholecystitis.After anti-infection treatment and PDG, the inflammation was controlled, his body temperature recovered to the normal level, and his hiccups also diaappeared. So I deduced that the hiccups were caused by cholecystitis.

***Dr. WAN Jun*:** The patient was at advanced age, and was admitted to our department with the complaining of intermittent hiccups for 1 month with a history of hematemesis. He had a history of recurrent hiccups before bleeding and the bleeding soon stopped after symptomatic treatment.But the hiccups were not alleviated, which had no response to acupuncture, metoclopramide and methylphenidate. Interestingly, the patient's hiccups would aggravate after meal consumption. Then physical examination and imaging test established the diagnosis of acute obstructive cholecystitis. Hiccups disappeared after the cholecystitis was controlled. Retrospective analysis of diagnostic procedure of this patient suggested that gastrointestinal bleeding be caused by mucosal tear syndrome of the cardia which resulted from recurrent hiccups, it then was associated with spasm of diaphragm, stimulated by the enlarged gallbladder and cholecystitis. The patient's medical records indicated that he also had the symptom of recurrent hiccups. The biochemical test showed an

elevation of γ-GT and ALP. His abdominal ultrasound revealed gallstone without any signs of cholecystitis. But it could not be completely excluded that there was no association between hiccups and cholecystitis. The exact mechanism of hiccups has not been completely understood. It is generally accepted that hiccups are a primitive reflex under the control of the medullary respiratory center. It was a phenomenon caused by contractions of the diaphragm, the scalenic and intercostals muscles, which result from a stimulation of the central or peripheral components of a hiccup reflex arc. Hiccups occur in both males and females, but persistent and intractable hiccups occur more frequently in males, especially in the patients over 50 years old. Hiccups are usually transient (lasting less than 48 hours) and uncomplicated. Hiccups are defined as persistent or protracted if they last between 48 hours and 1 month, and intractable when duration is greater than 1 month. It was ever reported that an American man suffered hiccups for up to 69 years and 9 months, the longest duration on records. It is very important to make clear of the origin of hiccups because persistent or intractable hiccups usually portend an organic cause. The causes may be grouped into the following categories: (1) Gastrointestinal diseases: esophagitis, gastric distention, gastric ulcer, gastric cancer, *etc*. (2) Chest diseases: pneumonia, pleurisy, diaphragmatic hernia, diaphragmatic abscess, *etc*. (3) Central nervous system diseases: cerebral hemorrhage, brain trauma, tumor, *etc*. (4) Drugs: sulfonamides, azithromycin, dexamethasone diazepam, other chemotherapy drugs, *etc*. (5) Metabolic infectious factors: hyponatremia, hypocalcemia, hyperuricemia, *etc*. It was rarely reported that hiccups were caused by cholecystitis. For hiccups, especially recurrent hiccups in elderly patients, hepatobiliary diseases should be firstly excluded. For this patient, PDG can not relieve the biliary obstruction, so the patient finally had an emergency surgery because of recurrent biliary infection. This also reminds us that surgical treatment should be the first choice as far as possible.

(Translator: WEN Junbao)

结石性胆囊炎致反复呃逆及消化道出血 1 例

1 病例摘要

患者男性, 91 岁, 主因“间断呃逆 1 个月伴呕鲜血 1 次”于 2010 年 1 月 7 日入我科治疗。患者于 2009 年 12 月 7 日晚在心血管二科住院期间, 无明显诱因开始出现间断呃逆, 伴有恶心、呕吐、腹泻, 呕吐物为胃内容物, 潜血阳性; 进食少量营养液或米汤时出现腹泻, 3～4 次/d, 便潜血间断呈阳性; 患者呃逆症状日间明显, 晚间入睡后呃逆消失, 给予埋耳豆、针灸及应用“甲氧氯普胺(胃复安)、哌甲酯(利他林)”等处理效果不佳。12 月 22 日上午 11 点, 患者坐位时突然出现呕吐, 呕吐物鲜血约 500 ml, 呕血后出现血压下降、心电监护显示 ST 段抬高, 立即给予留置胃管、冰盐水洗胃及应用立止血、醋酸奥曲肽、奥美拉唑等药物止血处理后消化道出血症状逐渐缓解; 呕血后呃逆症状消失, 经过对症处理后生命体征逐渐平稳, 但便潜血仍为阳性; 2010 年 1 月 4 日开始患者再次出现间断呃逆症状, 为了进一步诊断及治疗, 以“上消化道出血原因待查”收入我科。

既往史: 既往有肝炎、高血压、2 型糖尿病、陈旧性前壁心肌梗死、左室心尖处室壁瘤、多发性脑梗死、老年性痴呆等病史; 2009 年 1 月 7 日因呕吐导致上消化道大出血, 胃镜检查明确为贲门撕裂综合征, 经积极治疗后病情稳定。心脉隆皮试阳性, 否认其他药物及食物过敏史。

查体: 体温 36.5℃。全身皮肤、巩膜无黄染, 浅表淋巴结未触及肿大。双肺呼吸音粗, 未闻及干湿性啰音。心率 78 次/min, 律齐, 体位改变后心率变化明显, 各瓣膜听诊区未闻及杂音。腹平, 未见胃肠型蠕动波, 腹软, 全腹无压痛、反跳痛及肌紧张, 未扪及包块, 肝脾肋下未触及, Murphy 征阴性, 肝肾区无叩痛, 移动性浊音阴性, 肠鸣音活跃 5～6 次/min。双下肢无水肿, 双侧足背动脉搏动减弱。

辅助检查: 2010 年 1 月 5 日行血常规: PLT: 94×10^9/L, WBC:4.794×10^9/L, N: 0.664, HGB: 102 g/L。血生化: γ-GT: 221 U/L, TBIL: 17.8 μmol/L, DBIL: 13.53 μmol/L。凝血功能示 PT, APTT, INR 均正常。

入院诊断: (1) 上消化道大出血原因待查。贲门撕裂？十二指肠后壁病变出血？(2) 冠心病, 并陈旧性前壁心肌梗死和室壁瘤; (3) 高血压(3 级, 极高危); (4) 病态窦房结综合征; 快慢综合征; (5) 慢性支气管炎, 阻塞性肺气肿; (6) 2 型糖尿病; (7) 阿尔茨海默病(AD); (8) 陈旧性脑梗死; (9) 结肠多发性息肉; (10) 睡眠呼吸暂停综合征。

诊疗经过: 入院后考虑患者消化道出血原因以呃逆致贲门撕裂可能性大, 复查大便潜血为阴性, 鉴于患者无活动性出血征象, 故给予胃管注入米汤。患者仍间断有呃逆发作, 进食后呃逆加重, 每次持续时间 1～2 h 不等, 不予特殊处理能够自行停止, 夜间睡眠时无呃逆发生。2010 年 1 月 11 日患

者进食米汤后出现呕吐，呕吐物为胃内容物，呕吐后出现发热，最高达 38.4℃。查血常规：WBC: 12.72×10^9/L, N: 0.858，血生化：γ-GT: 227 U/L, ALP: 148 U/L, T-BIL: 27.5 μmol/L, D-BIL: 14.87 μmol/L。予抗感染治疗。1 月 12 日查体发现右上腹压痛，无反跳痛及肌紧张，未触及包块。行腹部 B 超及 CT 见巨大胆囊并胆囊底部渗出性改变，未见胆囊破裂征象，胆囊颈部结石。1 月 14 日查体发现右上腹压痛明显，右侧肋下 2 cm 可触及包块，边界清楚，触痛明显。复查血像、胆系酶谱、C 反应蛋白(CRP)等指标均继续升高。考虑胆系感染明确，遂加强抗感染治疗。肝胆外科会诊后认为患者高龄，心、肺功能差，合并室壁瘤及病窦综合征，无法耐受外科手术治疗。1 月 15 日在基础麻醉下，行经皮经肝胆囊穿刺引流，抽出浓稠胆汁共 220 ml。此后每日引流出黄绿色黏稠胆汁 20～50 ml 不等。患者体温很快恢复正常，血像、血生化等指标降至正常，呃逆症状也随之消失。查体腹部压痛消失，肝区仍有轻度叩击痛。引流胆汁由黄绿色逐渐变为黄白色黏稠物，引流量逐渐减少至 5～15 ml/d, 1 月 29 日停用抗生素。考虑患者胆囊颈部结石仍存在，肝胆外科再次会诊后认为患者高龄、心肺脑基础疾病多，外科风险大，暂缓手术治疗。2 月 4 日开始，胆囊引流管冲洗注入生理盐水时感觉阻力较前明显增大，胆汁引流通而不畅，但复查腹部 B 超示胆囊大小正常。2 月 8 日起患者再度出现反复高热，多次寒战，引流管间断有脓液流出。复查血像、CRP 再度升高，查体全腹轻度紧张，右上腹局限肌紧张，肝区叩痛。予抗感染及对症治疗，感染控制不佳。考虑胆系感染反复，全身脓毒血症明显。经院内会诊后，2 月 15 日行急诊手术治疗。术中见结石在胆囊壶腹部嵌顿，部分囊壁坏死，周围粘连严重。遂行胆囊部分切除、胆囊切开取石、胆囊造瘘术。

2 临床病例讨论

文军宝医师：患者反复呃逆，多次出现消化道出血，出血原因考虑为贲门撕裂综合征。入我科后，很快明确呃逆的原因是结石性胆囊炎。经过控制胆囊炎，呃逆消失。结石性胆囊炎导致的呃逆比较少见，从而提示我们对于呃逆这种临床常见的症状，除控制症状外，也应当考虑有无器质性病变可能。本例患者高龄，基础疾病多，胆囊结石手术风险大。但 PDG 及抗感染治疗，无法从根本上解除梗阻。因而，临床上对于此类老年结石性胆囊炎患者，仍应当尽力争取手术。

常青主治医师：患者有明确的呕鲜红色血液病史，呕血后出现血压下降，多次查大便潜血为阳性，消化道出血诊断明确。患者 2009 年 1 月时因呕吐导致上消化道出血，胃镜下明确出血原因为贲门撕裂；此次患者出血前有间断呃逆病史，呃逆时腹压、胃内压力也可明显升高，加之患者 91 岁高龄，食管胃黏膜损伤修复能力较年轻人差，故此次出血首先考虑为贲门黏膜撕裂所致。入院后查体发现右上腹压痛，行腹部 B 超及 CT 见胆囊颈部结石，梗阻性胆囊炎改变，胆囊肿大明显。经加强抗感染治疗，行经皮经肝胆囊穿刺引流术后，患者胆囊炎得到控制，体温恢复正常，呃逆症状也随之消失。故考虑该患者呃逆与胆囊炎相关。

万军主任医师：患者高龄，主因“间断呃逆 1 个月伴呕鲜血 1 次”入院。出血前有反复发作呃逆的病史，经过止血及对症治疗，消化道出血很快停止。但呃逆仍有反复，曾予哌甲酯、甲氧氯普胺及针灸等多种手段治疗，效果欠佳。患者呃逆有进食后症状加重的特点，后因查体发现右上腹部压痛，进而结合影像学检查诊断胆囊结石、化脓性胆囊炎。予控制胆囊炎后，呃逆症状也很快缓解。考虑此次发病为胆囊肿大、炎症刺激膈肌引发呃逆，进而导致贲门撕裂引起消化道出血。回顾患者既往病历，也曾多次出现呃逆，查血生化可见γ-GT、ALP 增高，B 超提示胆囊结石，但胆囊无肿大，无明显炎症改变。但既往反复发作呃逆，也不能完全排除为胆系感染所致。呃逆发生机制未明，一般认为是一种神经反射动作，受延髓呼吸中枢的控制。因某种物理或化学因素刺激胸颈髓段及延髓某处的迷走神经和膈神经反射中枢，引起膈肌、肋间肌及咽喉肌的不自主收缩或痉挛的一种临床症状。呃逆好发于男性，50 岁以上老年患者多见。多为一过性，不超过 48 h，可自行缓解。呃逆超过 48 h 为持续性呃逆，超过 1 个月为顽固性呃逆，国外有报道呃逆持续时间最长的可达 69 年零 9 个月。持续性或顽固性呃逆多存在器质性疾病，因此明确病因很重要。常见病因包括：(1) 胃肠道疾病：食管炎、胃扩张、胃溃疡、胃癌等；(2) 胸部疾病：肺炎、胸膜炎、膈疝、膈脓肿等；(3) 中枢性疾病：脑出血、颅脑外伤、肿瘤等；(4) 药物性因素：如磺胺类、阿奇霉素、地塞米松、地西泮(安定)、化疗药物等；(5) 代谢感染性因素：低钠血症、低钙血症、高尿酸血症等。复习国内外文献，胆囊炎引发呃逆较为少见。该病例也提示我们，对于呃逆这个临床常见的症状，尤其对于反复发作呃逆的老年患者，应当注意排除有无肝胆等器质性病变的可能。该患者行 PDG 后，病情有所缓解，但因

梗阻无法完全解除、胆系感染反复，最终因感染控制不佳行急症手术治疗，也提示我们对于类似患者，条件允许，仍当及早手术。

(参加讨论医师：文军宝，常 青，万 军，吴本俨)

(文军宝 整理)

· 临床病理讨论 ·

第二十二届长城国际心脏病学会议暨亚太心盟科学大会 2011

第二十二届长城国际心脏病学会议暨亚太心盟科学大会(The 22nd GW-ICC & APHF 2011)将于 2011 年 10 月 13-16 日在北京盛大呈献。

The 22nd GW-ICC & APHF 2011 将以更新的模式、全新的形象，带给您 ACC. 2011 最新研究进展，ESC 指南与解读，ISCP 全新概念与治疗目标，WHF、ASPC 全民预防与管理理念，JCS 心肌与心衰的深入研究，ESH 高血压控制与决策，ECAS、HRS 心律学战略与实践，i2、CCT、SCAI 介入策略与选择，以及 ASE、中德、G3C & UMN、CnAHA、海峡等等国际与地区合作的巅峰交流，心血管病预防、冠脉及介入、心衰、高血压、结构性心脏病等几乎所有心血管相关学科研究的高端享受，您将与来自全球的近千位顶尖专家、万余名参会嘉宾同场竞技、分享心得、共同学习，一起开拓和引领亚太地区的心血管及其相关学科的发展、进步!

大会现面向全球征集中英文论文摘要、讲题、临床研究及病例报告，请直接登录会议网站 www.gw- icc.org 进行在线投稿。入选摘要将刊登在《Heart》-BMJ Journals(Impact factor 5.385)，重大研究及优秀论文将在长城会上演讲或壁报交流。欢迎大家积极投稿!

与会者将获得由美国医学会颁发的继续医学教育学分 8 分和中国国家医学继续教育(I 类)学分。

“我参与、我奉献、我分享、我快乐”，长城会是创新、引进、交流的平台，更是专家、学者、临床医生、专业技术人员、科研工作者、学生等展现学术思想、创新研究的舞台，请您关注 www.gw-icc.org，长城会期待与您共同分享学术与成就的辉煌!

摘要征集内容：

1. 基础科学
2. 预防与流行病学
3. 心血管疾病临床研究
4. 心血管相关学科研究
5. 其他

征文要求及方法：

1. 内容：所有征文以摘要形式投稿，内容应真实，具有科学性、先进性和实用性且不涉及保密，署名无争议。稿件一律采用英文或中文两种形式。

2. 正文字数限制为 1000～1700 字符(约 500～800 字)。包括目的、方法、结果(应给出主要数据)、结论四个部分，各部分冠以相应的标题。不含图表，作者单位及邮编列于作者姓名的下一行。

3. 文责自负，请自留底稿。

4. 请直接登录会议网站 www.gw-icc.org 进行在线投稿。

5. 被录用的文章将刊登在 BMJ 联合征文，入选征文将刊登在 Heart(Impact factor 5.385)增刊并可在线检索(参阅 http://heart.bmj.com/content/96/ Suppl_3)。

截稿日期：

征文截止日期为 2011 年 5 月 30 日。

“长城优秀论文奖”

GW-ICC/APHF 是亚太地区心血管医生与国际交流的窗口，是专业研究、学术交流、培养专业医师和推出杰出人才的平台，如果您有独特的思维、精湛的研究、流畅的文笔，如果您是从事心血管领域或相关学科基础与临床工作的医师、研究人员及在职研究生，“临床研究报告”就是您的舞台，“长城优秀论文奖”就是对您杰出成就的褒奖。

参评条件：1. 中英文摘要投稿被大会录用；2. 按要求提交全文及课件；3. 需在相关论坛做报告。由中外专家现场评出优秀者。获奖者将获得荣誉证书和奖金 5000～1000 元人民币。欢迎广大青年医师及研究生积极参加。

详细信息敬请登录长城会会议网站 www.gw-icc.org 并垂询

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