·论 著·

内镜联合腹腔灌洗治疗重症急性胆源性胰腺炎的疗效

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摘要：目的 探讨内镜治疗联合腹腔灌洗治疗重症急性胆源性胰腺炎的临床疗效。**方法** 2009 年 1 月至 2014 年 1 月收治的重症急性胆源性胰腺炎患者 90 例，按数字随机分组法分为观察组及对照组，每组 45 例。对照组采用常规保守治疗；观察组在此基础上采用内镜逆行胰胆管造影（ERCP）及十二指肠乳头括约肌切开术（EST）联合腹腔灌洗治疗。腹腔灌洗治疗均于入院 1 ~ 3 d 进行，在 B 超引导下使用经皮肝穿刺胆道引流（PTCD）穿刺导管进行腹腔穿刺，在积液或积脓处留置引流管持续引流，2 d 后用甲硝唑以及生理盐水进行腹腔灌洗。如有胰腺坏死感染、合并有脓肿予以手术治疗。动态观察血尿淀粉酶及血白细胞计数，比较两组的治疗效果。**结果** 观察组 45 例患者行 ERCP 均成功，胆管显影率 100%，所有患者均进行了 EST，胆总管结石的清除率 88.9%；腹腔引流放置 PTCD 管 2 ~ 4 根/例，放置时间为 3 ~ 23 d。与对照组比较，观察组 1 个月内手术率、病死率均明显降低（$P < 0.05$ 或 $P < 0.01$），治愈率略有提高（$P > 0.05$），并发症发生率略有降低（$P > 0.05$），腹痛缓解时间、血尿淀粉酶及白细胞恢复正常时间以及住院时间均明显缩短（P 均 < 0.01）。**结论** 内镜治疗联合腹腔灌洗对重症急性胆源性胰腺炎可以起到很好的治疗效果，恢复快，并发症少，病死率低，可以在一定程度上替代外科手术治疗。

关键词： 胰腺炎，重症，急性，胆源性；内镜下逆行胰胆管造影；内镜下十二指肠乳头括约肌切开术；腹腔灌洗
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Therapeutic effect of endoscopic intervention combined with peritoneal lavage for the treatment of severe acute biliary pancreatitis

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Abstract: Objective To investigate the efficacy of endoscopic intervention combined with peritoneal lavage in the treatment of severe acute biliary pancreatitis. **Methods** Ninety patients with severe acute biliary pancreatitis admitted in our hospital between January 2009 and January 2014 were enrolled in this study, and the patients were divided into observation group and control group ($n = 45$ each) according to digital random grouping method. The conventional conservative treatments were taken in control group. On top of the conservative treatments, endoscopic retrograde cholangiopancreatography (ERCP) plus endoscopic sphincterotomy (EST) combined with peritoneal lavage were taken in observation group. The peritoneal lavage treatments were all performed within one to three days. Under the guidance of B ultrasound, the puncture catheter of percutaneous biliary drainage (PTCD) was used for the abdominocentesis, and the drainage tubes were indwelled in the places of effusion or empyema for continued drainage. The peritoneal lavage using metronidazole and normal saline was performed two days later. If pancreatic necrosis, infection and abscess existed the operation was actively performed in two groups. Blood and urine amylase, white blood cell count were dynamically observed. The therapeutic effects in two groups were compared. **Results** In the observation group, the ERCP were all successful; the bile duct visualization rate was 100%; EST were all performed; the clearance rate of choledocholithiasis was 88.9%; the number of indwelled PTCD tubes was 2 to 4 per patient; the time of indwelling PTCD tubes was 3 to 23 days. Compared with control group, the operation rate within one month, mortality decreased significantly in observation group ($P < 0.05$ or $P < 0.01$); the cure rate increased in

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observation group ($P>0.05$); the incidence of complication decreased in observation group ($P>0.05$); the time of abdominal pain remission, the time back to normal levels for blood / urine amylase and white blood cells count and the time of hospitalization stay were all shortened in observation group (all $P<0.01$). **Conclusion** The endoscopic intervention therapy combined with abdominal cavity lavage have the advantages of better efficacy, rapid recovery, fewer complications and lower mortality for the treatment of severe acute biliary pancreatitis and could replace the surgical treatment to some extent.

Key words: Pancreatitis, severe, acute, biliary; Endoscopic retrograde cholangiopancreatography; Endoscopic sphincterotomy; Peritoneal lavage

重症急性胆源性胰腺炎的发病原因主要是由于胆道结石导致的十二指肠壶腹部阻塞而引起高压的胆汁逆流进入胰管中，产生一系列的不良反应，其病情往往十分凶险，致死率高[1]。急诊剖腹探查对于患者来说又是一个很大的创伤，故需要寻求一种安全有效、创伤小、恢复快的治疗方法[2]。近年来，我院应用腹腔灌洗联合胆管探查术治疗重症急性胆源性胰腺炎，取得了良好的效果，现报道如下。

1 资料与方法

1.1 一般资料 2009 年 1 月至 2014 年 1 月本院普外科收治并确诊为重症急性胆源性胰腺炎患者 90 例，应用数字随机分组法将其分为观察组及对照组，每组 45 例。其中观察组男 27 例，女 18 例；年龄 33 ~ 79 岁，平均（43.6 ± 2.4）岁。对照组男 31 例，女 14 例；年龄 32 ~ 81 岁，平均（42.4 ± 3.1）岁。两组患者年龄、性别等一般资料比较差异无统计学意义（P 均 >0.05），具有可比性。

1.2 纳入标准 （1）有明确的急性胰腺炎的症状及体征；（2）血尿淀粉酶明显升高；（3）B 超或 CT 检查提示胰腺肿大，质地呈现不均表现，胰周可见积液；（4）腹腔穿刺可见血性液体，且穿刺液淀粉酶明显增高；（5）B 超或内镜胰胆管造影可见胆囊结石或胆总管结石、狭窄[3-4]。

1.3 治疗方法

1.3.1 常规治疗 对照组应用传统的常规治疗，即入院后予以禁饮禁食、胃肠减压、建立静脉通路、补液、抗感染、纠正水电解质平衡紊乱、抑制胰腺外分泌等处理，若临床诊断有胰腺坏死感染存在、合并有脓肿患者则予积极的手术治疗[5-6]。

1.3.2 内镜下逆行胰胆管造影 观察组在常规治疗基础上进行十二指肠镜检查即内镜下逆行胰胆管造影（ERCP），先找到十二指肠乳头，对乳头的形态进行观察，进行选择性胆管插管，尽量只显示胆管，根据显影作出诊断。所有患者均在内镜下进行乳头括约肌切开术（EST），并根据情况给予胆管内支架或放置鼻胆管引流。

1.3.3 腹腔灌洗引流 观察组于入院后 1 ~ 3 d 在 B 超引导下使用经皮肝穿刺胆道引流（PTCD）穿刺导管进行腹腔穿刺，在积液或积脓处留置引流管持续引流，根据具体位置决定放置引流管的数量。在操作过程中当 PTCD 管穿破腹膜后将针芯退出 3 cm，继续将外套管推进至适当的部位后拔出针芯，固定外套管，对胰性腹水以及坏死的组织进行引流。2 d 后用甲硝唑以及生理盐水进行腹腔灌洗，每日 2 次，待腹水完全消失后，将 PTCD 管逐一拔除[7]。

1.4 观察指标 （1）常规观察指标：两组患者腹痛缓解时间、血尿淀粉酶及白细胞恢复正常时间以及住院时间；（2）临床疗效：治愈率、并发症发生率、病死率、1 个月内手术率。

1.5 统计学方法 应用 SPSS 19.0 统计软件进行统计学处理。计量资料以 $\bar{x} \pm s$ 表示，组间比较采用独立样本 t 检验；计数资料或率的比较采用 χ^2 检验。$P<0.05$ 为差异有统计学意义。

2 结 果

2.1 观察组治疗情况 观察组 45 例患者行 ERCP 均获成功，胆管显影率 100%，其中 11 例单纯胆囊结石，15 例胆囊结石合并胆总管结石，14 例单纯胆总管结石，5 例单纯性胆总管下端狭窄。所有患者均进行了 EST，应用网篮将结石取出或结合机械碎石方法，胆总管结石的清除率 88.9%。14 例患者行内镜下鼻胆管引流术以及胆管内支架引流术。45 例患者均在入院后 1 ~ 3 d 置管腹腔引流，并应用甲硝唑以及生理盐水 500 ml 对腹腔进行灌洗处理。每例腹水引流总量达 1500 ~ 7500 ml；放置 PTCD 导管 2 ~ 4 根/例，放置时间 3 ~ 23 d。

2.2 两组常规观察指标比较 观察组患者的腹痛缓解时间、血和尿淀粉酶恢复正常时间、血白细胞恢复正常时间均短于对照组，差异均有统计学意义（P 均 <0.01）；住院时间分别为（20.5 ± 5.9）d、（43.1 ± 7.9）d，差异有统计学意义（$P<0.01$）。见表 1。

2.3 两组临床疗效比较 治疗 1 个月内手术率：观察组 3 例（6.7%），对照组 21 例（46.7%），差异有统

表 1 两组常规观察指标比较 ($d, \bar{x} \pm s$)

组别	例数	腹痛缓解时间	血淀粉酶恢复时间	尿淀粉酶恢复时间	血白细胞恢复时间
观察组	45	5.3 ± 2.4	11.2 ± 4.1	11.8 ± 2.9	9.3 ± 3.4
对照组	45	10.7 ± 3.9	16.2 ± 4.3	18.9 ± 5.1	14.4 ± 4.6
t 值		3.708	4.297	5.295	4.181
P 值		< 0.01	< 0.01	< 0.01	< 0.01

计学意义($\chi^2 = 18.409$, $P < 0.01$);并发症发生率:观察组 5 例(11.1%),对照组 11 例(24.4%)出现并发症,差异有统计学意义($\chi^2 = 2.736$, $P > 0.05$);病死率:观察组 2 例(4.4%)死亡,对照组 9 例(20.0%)死亡,差异有统计学意义($\chi^2 = 5.075$, $P < 0.05$);治愈率:观察组 95.6%,对照组 80.0%,差异无统计学意义($\chi^2 = 3.742$, $P > 0.05$)。

3 讨 论

近年来,随着胆结石发病率的不断上升,重症急性胆源性胰腺炎的发病率也不断增高。胆源性胰腺炎约占急性胰腺炎数量的 35%[8],而 65% 的患者可以检出结石的存在,胆石症患者胰腺炎的发生率约为无胆石症患者的 5 倍[9-11]。

过去对于此病的治疗多采用急诊剖腹探查手术,解除胆道梗阻,消除胰腺炎的发病因素。但手术对于全身情况较差的患者又是一个很大的创伤[12-14],近年来,ERCP 在临床上的应用为重症急性胆源性胰腺炎患者的治疗提供了一个新的、有效、安全的方法,对于梗阻性重症急性胰腺炎患者,在急诊或早期进行 ERCP 加 EST 处理的效果受到肯定,且可以有效避免急性胆管炎的发生。既往有研究指出,早期进行 ERCP患者的住院天数明显短于对照组,病死率明显低于对照组,表明 ERCP 急诊处理是安全的,联合 EST 处理后可以充分解除壶腹部梗阻,患者不必承受开腹手术的创伤[15-17]。这种治疗方式更加适用于老年患者,特别是合并有器官功能损害,对麻醉耐受性较差的患者。

本研究结果显示,观察组患者的腹痛缓解时间、血尿淀粉酶以及血白细胞恢复正常时间均明显短于对照组。因重症急性胰腺炎患者往往会出现大量的胰性腹水,其中含有大量的毒素以及有活力的胰酶成分[18],这些物质将对血管的通透性产生影响,诱发体循环衰竭[19],引起低血容量性休克;胰酶以及毒素还能够直接对组织器官产生损害作用,或是激活细胞因子产生级联反应[20],造成病理性损害。本文观察组应用腹腔穿刺置管引流术将腹腔内的大量液体引出,每日的引流量达 300 ~ 1500 ml,大量炎症因子、胰酶、毒素等被引流,与对照组比较降低了患者的病死率。患者相关并发症的发生率稍低于对照组,治愈率稍高于对照组,但差异均无统计学意义。本文观察组 3 ~ 23 d 平均置管时间内未发现置管相关并发症,但置管应尽可能在早期进行。观察组有 2 例死亡,均因发病后入院较迟(1 例发病后 10 d 才入院),最终因全身炎症反应综合征严重,导致多器官功能衰竭而死亡。

本研究结果显示,应用 ERCP 及 EST 联合腹腔灌洗治疗重症急性胆源性胰腺炎,其治愈率有提高趋势,病死率明显下降,并发症发生率有降低趋势,患者住院时间明显缩短,充分体现这一治疗方式的优越性,但仍需扩大样本量研究证实。

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自身免疫性疾病以及细胞替代治疗等方面具有广阔的临床应用前景。BMSCs 对骨质疏松症、血液病、缺血性心脏病、自身免疫性疾病等的治疗取得了一定效果[15-18]。

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