

# 空肠营养对重症急性胰腺炎的疗效观察

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**摘要** 目的:探讨早期空肠营养对重症急性胰腺炎(SAP)的疗效。方法:118名重症急性胰腺炎患者随机分为EN组和TPN组,比较两组SAP病人住院时间、费用、感染率、并发症及死亡率等。结果:TPN组住院时间长,费用高,感染率、并发症及病死率高,差异具有显著性。结论:早期空肠营养支持可明显改善SAP病情,提高治疗效果。

**关键词** 重症急性胰腺炎;空肠营养;预后

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## Effects of Enteral Nutrition on Patients with Severe Acute Pancreatitis

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**ABSTRACT Objective:** To investigate the effects of early enteral nutrition with severe acute pancreatitis (SAP). **Methods:** A total of 118 cases with SAP were randomly divided into 2 groups, enteral nutrition (EN) group and total parenteral nutrition (TPN) group. Compared their average hospital day, total expenses, the incidence of infections, complications, and the mortality rates et al. **Results:** There were longer hospital day, higher expenses, higher incidences of infections, compliments and mortality rates in TPN group than in EN group, with significant difference. **Conclusion:** EN can promote SAP and improve its prognosis.

**Key words:** Severe acute pancreatitis; Enteral nutrition; Prognosis

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重症急性胰腺炎(SAP)病情凶险,并发症多,病死率高10%-40%。其高代谢、高分解状态极易导致患者营养不良,营养支持已经在临床广泛应用。近年来,病人的营养模式发生了变化<sup>[1-3]</sup>,其治疗效果取得了明显进步。本文就将2008年1月至2009年12月在我院住院治疗的118例SAP患者的不同营养方法及其疗效影响进行分析。

### 1 资料和方法

#### 1.1 一般资料

2008年1月至2009年12月间,我院共收治SAP病人118例,其中男63例,女55例,年龄15-84岁,平均 $44 \pm 2.3$ 岁,APACHE评分为 $11.2 \pm 3.2$ 分。所有病人都符合2002年世界胃肠病大会颁布的急性胰腺炎诊治指南中的SAP诊断标准,BalthazarCT分级D-E级,APACHE评分 $\geq 8$ 分。

#### 1.2 分组

TPN组59例,其中男30例,女29例,年龄17-84岁,  $40.6 \pm 9.7$ 岁;EN组59例,其中男33例,女26例,年龄15-79岁,  $41.9 \pm 10.4$ 岁。两组年龄、性别、病情分级经检验差异无统计学意义(见表1)。

#### 1.3 方法

OLYMPUS-160胃镜,复尔凯鼻胃管,短肽型肠内营养剂。所有病人采取禁食禁饮、液体复苏、抑酸、抑制胰酶分泌、防治感染、器官功能支持和必要时胃肠减压及鼻胆管引流等治疗。

3-5天后,确认患者无明显肠梗阻及高度腹胀时随机选择59例放置空肠营养管开始EN,其余59例给予TPN。空肠营养管在胃镜辅助下将营养管置入空肠上段,并在X光机透视确定在鼻空肠营养管在屈氏韧带后。首日滴入生理盐水500ml,如无不适,次日开始空肠营养(短肽型肠内营养剂),第一天给1/4-1/2营养量,逐日增加至全量。

#### 1.4 观察指标

统计两组患者的平均住院天数、平均费用、白细胞复常时间、并发症、感染率、死亡率等。

#### 1.5 统计学处理

以spss10.0统计软件包处理,计量资料比较采用t检验,计数资料比较采用 $\chi^2$ 检验,确定 $P < 0.05$ 有统计学意义。

### 2 结果

本研究通过对重症急性胰腺炎采用肠内、肠外营养治疗后比较,得出并发症、死亡率EN组较TPN组下降, $P < 0.05$ ,差异有统计学意义,EN组感染率较TPN组下降,白细胞复常、住院时间缩短,费用降低, $P < 0.05$ ,差异均有统计学意义,EN组症状缓解快,但 $P > 0.05$ ,差异没有显著性(见表2),其结果与研究报告相一致<sup>[4-7]</sup>。

### 3 讨论

空肠营养不刺激胰外分泌,有助于维护肠屏障功能和防止细菌移位,能为病人引流的消化液(胃液及胆汁)再利用提供通道以及价廉等优点,均已被基础与临床研究所证实,同时也避免了肠外不适当营养而对机体造成损害<sup>[8]</sup>。细胞因子等炎症

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介质在对胰腺炎导致的全身病理影响的作用,近几年来受到了重视。这些如 TNF $\alpha$ 、IL-1 $\beta$ 、IL-6、IL-8 等细胞因子,不但来自胰腺炎性细胞本身,且可因肠屏障功能受损,肠内内毒素通过肠屏障进入血循环,刺激单核巨细胞、T 细胞、血管内皮细胞等产生,进一步大量产生与释放,加重 SIRS 及 MODS<sup>[9]</sup>。空肠营养有助于减轻全身炎症反应及各器官功能与结构的损害,同时不刺激胰腺分泌,故在疾病早期使用肠内营养支持是必要的,能明显改善病人的预后。而肠外营养支持可引起机体一些不良反应和导管并发症,还可导致肠粘膜细胞凋亡、萎缩、

肠道通透性增加肠道菌群失调,屏障功能损害、引发肠道细菌和内毒素移位<sup>[10-12]</sup>,导致胰腺、胰周坏死而继发感染,形成脓肿和脓毒血症,加重胰腺和全身器官的损害,诱发 MODS,甚至死亡。空肠营养使机体代谢更符合生理特点<sup>[13-16]</sup>,有效地克服胰腺炎症坏死所致的胃十二指肠动力障碍,改善全身营养状况,同时可维持肠道机械、生物、和免疫屏障功能和结构的完整性,防止细菌和内毒素移位,减少肠源性感染和感染性并发症的发生率。

表 1 一般资料及分组

Table 1 General data of two groups

| Patient information | TPN group(n=59) | EN group(n=59)  |
|---------------------|-----------------|-----------------|
| Age (years)         | 40.6 $\pm$ 9.7  | 41.9 $\pm$ 10.4 |
| Sex (male / female) | 30/29           | 23/26           |
| APACHE Rating       | 11.5 $\pm$ 3.3  | 12.1 $\pm$ 2.5  |
| BalthazarCT(CTSI)   | >4 分            | >4 分            |
| Cause(%)            |                 |                 |
| Bi liary            | 40( 67.8)       | 38( 64.4)       |
| Alcoholic           | 8( 13.6)        | 10( 16.9)       |
| Overeating          | 7( 11.9)        | 8( 13.6)        |
| Other               | 4( 6.8)         | 3( 5.1)         |

表 2 两组治疗效果

Table 2 Resules of two groups

| Group | Symptoms<br>(d) | Normalization of<br>white blood cells<br>(d) | Infection<br>(%) | Complications<br>(%) | Mortality<br>(%) | Length of<br>hospital stay<br>(d) | Average cost<br>(Million) |
|-------|-----------------|----------------------------------------------|------------------|----------------------|------------------|-----------------------------------|---------------------------|
|-------|-----------------|----------------------------------------------|------------------|----------------------|------------------|-----------------------------------|---------------------------|

因此,重症急性胰腺炎在住院 3-5 天,胃肠功能有所恢复,无明显腹胀、肠蠕动恢复、肛门排气,予以内镜下置管早期空肠营养是可行的,不仅有利于病情恢复,减少并发症,还可节省住院费用,缩短住院时间。

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