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乌司他丁与沐舒坦治疗严重烧伤伴吸入性损伤的疗效分析*

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摘要 目的: 探讨严重烧伤伴中重度吸入性损伤患者早期联合使用大剂量乌司他丁与沐舒坦的临床疗效。**方法:** 选择2003年5月~2013年5月在我院接受治疗的185例严重烧伤伴中重度吸入性损伤患者,随机分为两组,治疗组93例,对照组92例。两组患者在确诊为中重度吸入性损伤后,立即给予传统常规治疗:吸氧、视情尽早预防性气管切开、湿化气道及气道灌洗、翻身拍背吸痰、呼吸机辅助呼吸等。治疗组在常规治疗的基础上给予乌司他丁40万单位,每隔8h静脉滴注,沐舒坦450mg,每隔12h微泵静推;对照组给予乌司他丁10万单位,每隔8h静滴,沐舒坦30mg,每隔8h静滴,疗程为10天,比较两组患者急性肺损伤(ALI)的发生率、急性呼吸窘迫综合征(ARDS)的发生率、呼吸机使用时间、死亡率。**结果:** 治疗组93例患者,治愈92例,死亡1例,死亡率为1.08%(1/93),治疗过程中发生ALI34例,ARDS12例,呼吸机使用时间为 (4.2 ± 2.1) d。对照组92例患者治愈88例,死亡4例,死亡率为4.35%(4/92),治疗过程中发生ALI43例,ARDS17例,呼吸机使用时间为 (8.2 ± 2.7) d。两组患者ALI发生率、ARDS发生率、呼吸机使用时间、治愈率差异均有统计学意义($P < 0.05$)。**结论:** 对于严重烧伤伴中重度吸入性损伤的患者,在气管切开的前提下,给予常规传统治疗的同时,采用大剂量乌司他丁与沐舒坦早期联合使用给药,能够明显的提高治愈率,降低并发症,值得在临床上广泛推广应用。

关键词: 乌司他丁;沐舒坦;严重烧伤;疗效

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Efficacy of High-dose Ulinastatin and Ambroxol Using for Early Combination of Severe Burns with Severe Inhalation Injury*

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ABSTRACT Objective: To investigate the clinical efficacy of large doses Ulinastatin with ambroxol using for severe burns with severe inhalation injury in patients with early joint. **Methods:** 185 cases of severe burns with severe inhalation injury from May 2003 to May 2013 treated in our hospital were selected and randomly divided into two groups, the treatment group with 93 cases, 92 cases of the control group. Both groups were diagnosed with moderate to severe inhalation injury, immediately given the traditional conventional treatment: oxygen, depending on the situation as soon as possible preventive tracheotomy airway humidification and airway lavage, stand back suction, ventilator-assisted breathing. Treatment group was given Ulinastatin 400,000 units every 8h intravenously Ambroxol 450mg, every 12h micropump bolus on the basis of the conventional treatment; control group were given ulinastatin 100,000 units every 8h infusion, ambroxol 30mg, every 8h intravenously, treatment for 10 days. Acute lung injury(ALI) the incidence of acute respiratory distress syndrome (ARDS) the incidence of ventilator use of time, death rate were compared between the two groups of patients with. **Results:** The treatment group, 93 patients were cured 92 cases, 1 patient died, the mortality rate was 1.08% (1/93), the course of treatment ALI34 cases, ARDS12 cases, mechanical ventilation time was (4.2 ± 2.1) d. Control group, 92 patients were cured 88 cases, 4 deaths, the mortality rate was 4.35% (4/92), the course of treatment ALI43 cases, ARDS17 cases, mechanical ventilation time was (8.2 ± 2.7) d. Two groups of patients the incidence of ALI, ARDS incidence of ventilator use of time, the cure rate differences were statistically significant ($P < 0.05$). **Conclusion:** For severe burns with severe inhalation injury patients, tracheotomy premise, given conventional treatment, giving high-dose ulinastatin conjunction with ambroxol early could significantly improve the cure rate, reduce complications, so it was worth widely used in clinical application.

Key words: Ulinastatin; Mucosolvan; Severe burns; Efficacy

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前言

吸入性损伤指的是呼吸道、甚至肺部实质的损伤,主要是由热、化学损伤同时存在引起^[1]。严重烧伤的病人常存在吸入性损伤,如果深度烧伤创面清理不及时,极易发生全身感染,而吸入性损伤如果未得到及时治疗,常可引发窒息、急性肺损伤、肺部严重感染及急性呼吸窘迫综合症(ARDS)等病症^[2-6]。因此,吸入性损伤是烧伤病人治疗的重点及难点,有极高的病死率。本研究选择 185 例严重烧伤伴中重度吸入性损伤患者,探讨了大剂量乌司他丁(广东天普医药公司生产)与沐舒坦(盐酸氨溴索,勃林格殷格翰公司生产)早期联合使用在治疗严重烧伤伴中重度吸入性损伤的疗效,现报告如下。

1 资料与方法

1.1 临床资料

2003 年 5 月~2013 年 5 月在我院接受治疗的 185 例严重烧伤伴中重度吸入性损伤患者,其中男 142 例,女 42 例,年龄 14~65 岁,平均年龄(36.8±14.8)岁。烧伤面积 50%~97% TBSA,Ⅲ度烧伤面积 25%~94%,均为火焰烧伤。中度吸入性损伤 136 例,重度吸入性损伤 49 例。随机的分为两组,治疗组 93 例,对照组 92 例,两组患者在年龄、性别、烧伤程度及吸入性损伤程度等方面的差异无统计学意义,具有可比性。

1.2 治疗方法

185 例严重烧伤患者确诊有吸入性损伤后,按常规传统方法给予立即吸氧,尽早气管切开,冲洗气道,排除分泌物,解除

气道梗阻,保持气道畅通,湿化气道及气道灌洗,翻身拍背吸痰,必要时呼吸机辅助呼吸,全身应用抗生素,并采用雾化吸入 2 mL 0.45% 氯化钠溶液 +5 mg 地塞米松 +8U 庆大霉素 +15 mg 沐舒坦。治疗组在常规治疗的基础上给予乌司他丁 40 万单位,每隔 8h 静脉滴注,沐舒坦 450 mg,每隔 12 h 微泵静推,疗程为 10 天;对照组给予乌司他丁 10 万单位,每隔 8 h 静滴,沐舒坦 30 mg,每隔 8h 静滴,疗程为 10 天。患者治疗期间积极给予营养支持,抗感染,尽早修复深度烧伤创面,不定期的床边支气管镜检查和治疗,必要时应用呼吸机辅助呼吸治疗。加强护理,鼓励患者深呼吸和有效咳嗽,排痰困难者拍背吸痰,1 次/2~4h,利于气道分泌物排出。比较两组患者的临床疗效。

1.3 统计学分析

运用 SPSS19.0 软件对数据进行统计分析,两组病例治愈率的比较采用 X² 检验, P<0.05 表示差异有统计学意义。

2 结果

2.1 两组患者的治疗效果

185 例严重烧伤伴中重度吸入性损伤患者,治愈 180 例,死亡 5 例。治疗组 93 例患者,治愈 92 例,死亡 1 例,病人死于急性肾功能衰竭,治疗组死亡率为 1.08%(1/93),对照组 92 例患者治愈 88 例,死亡 4 例,2 例死于急性肾功能衰竭,1 例死于烧伤脓毒症,1 例死于多器官功能障碍综合症(MODS),对照组死亡率为 4.35%(4/92),两组患者死亡率差异有统计学意义(P<0.05)。见表 1。

表 1 两组患者临床疗效

Table 1 Comparison of clinical efficacy of two groups

Category	number of cases	Cure	Death	Cure rate(%)
Treatment group	93	92	1	1.08*
Control group	92	88	4	4.35

注:*表示与对照组相比,P<0.05。

Note: * indicates P <0.05 comparing with control group.

2.2 两组患者并发症发生情况及呼吸机使用时间比较

治疗组治疗过程中发生 ALI34 例,发生率为 36.56%, ARDS12 例,发生率为 12.90%,呼吸机使用时间为(4.2±2.1) d; 对照组治疗过程中发生 ALI43 例,发生率为 46.74%,

ARDS17 例,发生率为 18.48%,呼吸机使用时间为(8.2±3.7) d。两组患者 ALI 发生率、ARDS 发生率、呼吸机使用时间、治愈率差异均有统计学意义(P<0.05)。见表 2。

表 2 两组患者并发症发生情况及呼吸机使用时间比较

Table 2 Comparison of incidence of complications and ventilator time in groups of patients

Category	例数	ALI	ARDS	呼吸机使用时间
Treatment group	93	34(36.56*)	12(12.90*)	(4.2±2.1)*d
Control group	92	43(46.74)	17(18.48)	(8.2±3.7)d

注:*表示与对照组相比,P<0.05。

Note: * indicates P <0.05 comparing with control group.

观察组用药过程中有 9 例发生不同程度的不良反应,其中 6 例出现恶心、呕吐、腹泻等症,3 例皮疹,不良反应发生率为 9.68%;对照组 8 例发生不同程度的不良反应,其中 5 例出现恶

心、呕吐、腹泻等症,3 例皮疹,不良反应发生率为 8.70%,两组不良反应发生率差异无统计学意义。出现不良反应的患者均经有效措施处理后好转,未终止用药。

3 讨论

严重烧伤伴吸入性损伤的患者常发生肺部并发症及全身性感染,是引发患者死亡的主要原因^[7-8]。相关研究报道,严重烧伤伴吸入性损伤的病死率可达 60%,而重度吸入性损伤的病死率能够达到 90%^[9-11]。因此,如何提高严重烧伤伴中重度吸入性损伤病人的治愈率,降低病死率,仍是烧伤工作者需不断研究的课题。

气管切开是治疗吸入性损伤的关键步骤,也是防止气道梗阻的有效措施,还有利于低氧血症的治疗^[12]。除了对明确有中重度吸入性损伤或高危呼吸困难的患者尽早气管切开,对于特重度烧伤还未准确判断损伤程度的患者,也应果断进行预防性气管切开^[13]。早期气管切开具有以下优点:①便于手术时呼吸道的管理;②便于清理黏膜脱落坏死组织及呼吸道分泌物;③便于机械通气^[14]。气管切开后应常规做心电图监测,观察氧分压(PaO₂)及血氧饱和度(SaO₂)的变化,如果 PaO₂降低到 85%以下,最好采用人工呼吸机辅助呼吸,便于二氧化碳排出及组织供氧^[15-17]。

乌司他丁可以抑制中性粒细胞分泌蛋白酶,抑制多种炎症反应,降低超氧化物歧化酶,减少氧自由基的释放,可以减轻炎症反应对机体器官的损害。沐舒坦具有促进粘液排除,溶解分泌物的特点,因此,可以促进烧伤患者排痰,改善其呼吸状态,保护呼吸道黏膜,保证呼吸道黏膜的表面活性物质发挥正常的作用^[18-20]。本研究对严重烧伤伴中重度吸入性损伤患者尽早气管切开,在常规治疗的基础上治疗组采用大剂量乌司他丁与沐舒坦联合用药,结果显示,治疗组 93 例患者,治愈 92 例,死亡 1 例,死亡率为 1.08%(1/93),对照组 92 例患者治愈 88 例,死亡 4 例,死亡率为 4.35%(4/92),两组患者死亡率差异有统计学意义(P<0.05)。治疗组 1 例死于急性肾功能衰竭,对照组 2 例死于急性肾功能衰竭,1 例死于烧伤脓毒症,1 例死于多器官功能障碍综合征(MODS)。说明了两组患者均取得了良好的治疗效果,患者的治愈率较目前研究报道高,而大剂量的乌司他丁与沐舒坦联合用药的效果优于小剂量的效果。另外,两组患者 ALI 发生率、ARDS 发生率差异均有统计学意义(P<0.05)。总之,采用大剂量乌司他丁与沐舒坦早期联合使用治疗严重烧伤伴中重度吸入性损伤的患者,能够明显的提高治愈率,降低并发症,值得在临床上广泛推广应用。

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