doi: 10.13241/j.cnki.pmb.2017.26.031

地塞米松联合尿激酶治疗结核性胸膜炎的临床效果分析

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摘要 目的:探讨地塞米松联合尿激酶对结核性胸膜炎的临床效果。**方法:**选择 2013 年 8 月到 2016 年 5 月在我院进行诊治的结核性胸膜炎患者 190 例,根据随机信封抽签原则分为观察组与对照组各 95 例,两组都给予标准抗结核治疗方案,对照组在抗结核治疗的同时给予尿激酶治疗,观察组再给予地塞米松治疗,两组都治疗 1 个月。治疗后,比较两组的总有效率、不良反应的发生情况、胸腔积液完全引流时间、抽出胸腔积液总量、凝血酶原时间和凝血酶时间。**结果:**所有患者都注射耐受良好,未见严重并发症;观察组的总有效率(88.4%)明显高于对照组(72.6%);观察组胸腔积液完全引流时间和抽出胸腔积液总量分别为 7.56± 2.44d 和 2867.33± 456.10 mL,对照组分别为 9.44± 2.89d 和 1989.92± 444.20 mL,观察组胸腔积液完全引流时间明显短于对照组,且抽出胸腔积液总量显著高于对照组(P<0.05)。治疗后,两组的凝血酶原时间和凝血酶时间都明显高于治疗前(P<0.05),且观察组显著高于对照组(P<0.05)。**结论:**地塞米松联合尿激酶治疗结核性胸膜炎能延长凝血酶时间和凝血酶原时间,缩短胸腔积液引流时间,增加抽出胸腔积液总量,安全性和临床疗效均较好。

关键词:地塞米松;尿激酶;结核性胸膜炎;凝血酶时间;胸腔积液

中图分类号:R521.7 **文献标识码:**A **文章编号:**1673-6273(2017)26-5138-03

Analysis of the Clinical Effect of Dexamethasone Combined with Urokinase on the Tuberculous Pleurisy

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ABSTRACT Objective: To investigate the clinical effect of dexamethasone combined with urokinase on the tuberculous pleurisy. **Methods:** From August 2013 to May 2016, 190 cases of tuberculous pleurisy patients in our hospital were selected. All the patients were randomly divided into the observation group and control group with of 95 patients in each group, both groups were treated with anti tuberculosis treatment, the control group was given urokinase treatment, the observation group was given dexamethasone combined with urokinase treatment, both groups were treated for 1 month. After treatment, the total effective rate, incidence of adverse reactions, total drainage time of pleural effusion, total amount of pleural effusion, thrombin time and prothrombin time of two groups were compared. **Results:** All patients were well tolerated with injection during the treatment and there was no severe complication after treatment; the total effective rates in the observation group and the control group were 88.4% and 72.6%, which was significantly higher in the observation group than that of the control group (P<0.05). The total drainage time and total amount of pleural effusion in pleural effusion in the observation group were 7.56± 2.44 d and 2867.33± 456.10 mL, the control group were 9.44± 2.89 d and 1989.92± 444.20 mL, the total drainage time in the observation group was significantly shorter than that of the control group, and the total amount of pleural effusion was significantly higher than that of the control group(P<0.05). After treatment, the pleural effusion thrombin time and prothrombin time in both groups were significantly higher than those before treatment (P<0.05), which were higher in the observation group than those of the control group (P<0.05). **Conclusion:** Dexamethasone combined with urokinase could prolong the thrombin time and prothrombin time, shorten the time of drainage of pleural effusion, increase the pleural effusion amount, with good safety and clinical effect in the treatment of tuberculous pleurisy.

Key words: Dexamethasone; Urokinase; Tuberculous pleurisy; Thrombin time; Pleural effusion

Chinese Library Classification(CLC): R521.7 Document code: A

Article ID: 1673-6273(2017)26-5138-03

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(收稿日期:2016-11-13 接受日期:2016-12-08)

前言

结核性胸膜炎(tuberculous pleurisy,TP)当前在我国的发病率明显升高,且有年轻化的趋势[1,2]。结核性胸膜炎是胸腔膜感染结核杆菌导致的炎症性病变，研究表明炎症细胞因子在 TP 的发生发展中发挥了重要作用[3,4]。目前,临床上 TP 治疗尚未形成统一的规范，传统治疗措施是全身抗痨加局部抽胸水治疗，虽有一定的效果，但是也有部分患者因治疗不当导致胸膜粘连、包裹,诱发形成结核性脓胸,不利于患者康复[5,6]。因此,寻找安全高效的 TP 治疗方案是临床上的当务之急。蛋白水解酶尿激酶是非特异性纤溶酶原激活物,对于结核性胸腔积液因富含纤维蛋白而积液稠化产生蛋白凝块能起到良好的降解作用,可有效减少胸膜增厚粘连[7]。地塞米松具有抑制激素肽和组织胺等炎性介质产生、减轻结核性胸膜炎患者炎性反应等作用,可达到减少组织粘连的目的[8,9]。本研究主要探讨了地塞米松联合尿激酶对结核性胸膜炎预后的影响,现报道如下。

1 资料与方法

1.1 研究对象

选择在我院进行诊治的结核性胸膜炎患者 190 例,时间为 2013 年 8 月到 2016 年 5 月,纳入标准:年龄 20-80 岁;均符合结核性胸膜炎诊断标准;病程 1-6 周;患者及家属签属知情同意书;研究得到医院伦理委员会的批准。排除标准:对尿激酶、地塞米松、抗结核药物等过敏者;严重心、肺、肝、肾疾病及精神疾病等;有支气管胸膜瘘者;年龄小于 18 岁、大于 80 岁;妊娠与哺乳期妇女。研究对象根据随机信封抽签原则被平均分为观察组与对照组,两组的相关基础资料比较差异均无统计学意义(P>0.05),具有可比性。见表 1。

表 1 两组基础资料对比

Table 1 Comparison of the basic data between two groups

Indicators	Observation group (n=95)	Control group (n=95)	P
Gender(Male/female)	45/50	42/53	>0.05
Age(year)	56.35± 4.52	56.13± 3.95	>0.05
Pathogenic site(left side/right side)	50/45	54/41	>0.05
BMI(kg/m^2)	22.34± 1.78	22.21± 1.71	>0.05
Course of disease(week)	3.23± 0.46	3.11± 0.29	>0.05

1.2 治疗方法

所有患者都接受标准抗结核治疗方案 -2HRZE/4HR,具体 H 为雷米封 0.3g,1 次 /d;R 为利福平 0.45 g,1 次 /d;Z 为吡嗪酰胺 0.5g,3 次 /d;E 为乙胺丁醇 0.75 g,1 次 /d。对照组:在抗结核治疗同时隔一日给予胸腔穿刺抽液处理,直到胸腔内液体抽完为止,每次抽液总量不超过 1000 mL,尿激酶 20 万 U (国药准字 H13020277,河北智同生物制药有限公司)和 0.9% 氯化钠注射液 20 mL 溶解后胸腔注射。观察组:在上述基础上行胸腔注射地塞米松 5 mg(扬州制药有限公司,国药准字 H32021329)和 0.9% 氯化钠注射液 20 mL。两组都治疗观察 1 个月。

1.3 观察指标

(1)疗效标准:显效:主要症状、体征消失,胸腔积液完全吸收;有效:主要症状、体征明显改善,无需抽液;无效:无达到上述标准甚或恶化。总有效率 =(显效例数 + 有效例数)/ 总例数×100.0%。(2)观察记录胸腔积液完全引流时间和抽出胸腔积液总量。(3)凝血酶原时间和凝血酶时间测定:所有患者在治疗前后抽取静脉血,采用凝固法测定凝血酶原时间和凝血酶时间。

1.4 统计学方法

选择 SPSS19.0 软件,假设性检验采用配对 t 检验、独立样本 t 检验、x^2 检验或者 Fisher 确切概率法，以 P<0.05 为差异有统计学意义。

2 结果

2.1 两组的临床疗效对比

治疗过程中,所有患者都注射耐受良好,治疗过程中及治疗后均未出现严重并发症;观察组的治疗总有效率明显高于对照组(P<0.05)。见表 2。

表 2 两组治疗有效率对比(例)

Table 2 Comparison of the effective rate between two groups(n)

Groups	n	Remarkable effective	Effective	Ineffective	Effective rate
Observation group	95	60	24	11	88.4%
Control group	95	35	34	26	72.6%
P					<0.05

2.2 两组的胸腔积液完全引流时间和抽出胸腔积液总量对比

观察组胸腔积液完全引流时间和抽出胸腔积液总量分别为 7.56± 2.44d 和 2867.33± 456.10 mL,对照组分别为 9.44± 2.89d 和 1989.92± 444.20 mL，观察组胸腔积液完全引流时间明显短于对照组,且抽出胸腔积液总量显著高于对照组(P<0.05)。见表 3。

表 3 两组胸腔积液完全引流时间和抽出胸腔积液总量对比(均数± 标准差)

Table 3 Comparison of the pleural effusion complete drainage time and total amount of pleural effusion between two groups($\bar{x}\pm s$)

Groups	n	Pleural effusion complete drainage time(d)	Total amount of pleural effusion (mL)
Observation group	95	7.56± 2.44	2867.33± 456.10
Control group	95	9.44± 2.89	1989.92± 444.20
P		<0.05	<0.05

2.3 两组的凝血酶时间和凝血酶原时间对比

治疗后,两组的凝血酶原时间和凝血酶时间都明显高于治疗前(P<0.05),且观察组的凝血酶时间和凝血酶原时间均显著长于对照组(P<0.05)。见表 4。

表 4 两组治疗前后凝血酶时间和凝血酶原时间变化对比(均数± 标准差)

Table 4 Comparison of the TT and PT before and after treatment between two groups($\bar{x}\pm s$)

Groups	n	TT		P	PT		P
		Before treatment	After treatment		Before treatment	After treatment	
Observation group	95	58.02± 15.39	130.29± 24.19	<0.05	41.75± 12.49	78.22± 14.20	<0.05
Control group	95	58.22± 14.82	78.39± 17.11	<0.05	41.98± 11.56	64.29± 15.22	<0.05
P		>0.05	<0.05		>0.05	<0.05	

3 讨论

结核性胸膜炎是最常见的感染性胸膜疾病,主要是结核杆菌直接侵犯胸膜所致[10]。在临床上可形成包裹性积液和广泛胸膜增厚,从而影响患者的肺功能[11]。结核性胸膜炎虽经常规治疗有一定的效果,但仍有部分患者会出现胸膜粘连等,造成临床治愈困难[12]。现代研究表明结核性胸腔积液中含有多种凝血与纤溶因子,为此采用促纤溶治疗有比较好的效果。尿激酶作为非特异性纤溶酶原激活物,能降低胸腔积液的粘稠性,裂解纤维分隔;也非特异地将纤溶酶原激活成纤溶酶,使胸腔积液引流量增加[13]。从健康人尿中提取的蛋白水解酶尿激酶是第一代非特异性纤溶酶原激活物,可促使胸腔内的纤溶酶原转为纤溶酶,可减轻胸腔粘连程度[15]。地塞米松属于肾上腺素皮质激素类药,可减少过敏介质和炎性介质的释放,降低胸腔内血管通透性从而减少胸腔积液的渗出和促进胸腔积液的吸收,减少血容量和促进尿液的排出,并且地塞米松也可避免胸腔积液中纤维蛋白的沉积,减少胸膜肥厚粘连,减轻因结核杆菌感染所引起的变态反应[14, 16-17]。

本研究显示所有患者都注射耐受良好,治疗过程中及治疗后均未见严重并发症; 对照组与观察组的总有效率分别为 72.6%和 88.4%, 观察组胸腔积液完全引流时间和抽出胸腔积液总量分别为 7.56± 2.44d 和 2867.33± 456.10 mL, 对照组分别为 9.44± 2.89d 和 1989.92± 444.20 mL, 表明地塞米松联合尿激酶的应用能缩短胸腔积液引流时间,增加抽出胸腔积液总量,提高临床疗效。尿激酶在血液循环中半衰期为 10-16 min,而胸腔内注射尿激酶仍然能确保胸腔积液在数小时内处于纤溶状态[18]。地塞米松具能减低患者胸腔积液生成过程中自身抗体水平,减少患者纤维蛋白渗出;并且尿激酶联用地塞米松能够减轻其产生的刺激作用,减少患者的不适[19,20]。本研究显示治疗后观察组的凝血酶时间和凝血酶原时间也长于对照组,表明地塞米松的应用能促进尿激酶的促纤溶作用持续时间。

总之,地塞米松联合尿激酶治疗结核性胸膜炎能延长凝血酶时间和凝血酶原时间,缩短胸腔积液引流时间,增加抽出胸腔积液总量,安全性和临床疗效均较好。

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