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老年慢性阻塞性肺疾病急性期合并肺结核感染的治疗方法及其疗效探讨

石蕊

(成都医学院第一附属医院感染科, 成都 610500)

[摘要] 目的: 探讨老年慢性阻塞性肺疾病(chronic obstructive lung disease, COPD)急性期合并肺结核感染的治疗方法及其疗效。方法: 选取2014年2月至2016年2月我院收治的老年慢性阻塞性肺疾病急性期合并肺结核感染的患者92例, 根据治疗方式随机分为治疗组和对照组, 对照组给予COPD对症支持治疗和抗肺结核治疗, 治疗组在对照组基础上加用痰热清, 比较两组患者治疗有效率、痰培养阴转率以及肝肾损害情况的差异。结果: 治疗组患者治疗后痰培养阴转率(36例, 85.71%)与对照组(41例, 82.0%)的差异无统计学意义($P>0.05$)。两组患者治疗后的症状积分均低于治疗前, 且差异具有统计学差异($P<0.05$), 治疗组治疗后的症状积分(85.62 ± 11.37)低于对照组(91.25 ± 12.38), 且差异具有统计学差异($P<0.05$)。治疗组治疗后痊愈2例(4.76%), 显效26例(61.90%), 有效10例(23.81%), 无效4例(9.52%); 对照组治疗后痊愈1例(2.0%), 显效17例(34.0%), 有效22例(44.0%), 无效10例(20.0%); 治疗组治疗疗效明显优于对照组, 且差异具有统计学意义($P<0.05$)。治疗组治疗后发生肝肾损害14例, 对照组11例, 两组患者治疗后肝肾损害发生率的差异无统计学意义($P>0.05$)。结论: 在不影响痰培养阴转率和不加重肝肾负担的情况下, 老年COPD急性期合并肺结核感染患者接受一般性治疗的同时进行中医治疗, 其疗效更为显著。

[关键词] 慢性阻塞性肺疾病; 肺结核; 补肺通络化痰方; 有效率; 肝肾功能损害

The treatment method and curative effect of pulmonary tuberculosis infection in elderly patients with acute chronic obstructive lung disease

SHI Han

(Department of Infectious Diseases, Chengdu Medical School First Affiliated Hospital, Chengdu 610500, China)

Abstract **Objective:** To investigate the treatment method and curative effect of pulmonary tuberculosis infection in elderly patients with acute chronic obstructive lung disease (COPD). **Methods:** Selected 92 cases of elderly patients with COPD complicated with pulmonary tuberculosis in our hospital from February 2014 to February 2016, and randomly divided into treatment group and control group according to the treatment method. The two groups were treated with the same clinical therapy included COPD symptomatic and supportive treatment and anti-

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通信作者 (Corresponding author): 石蕊, Email: shihan0387@sina.com

tuberculosis treatment. Besides, the treatment group was given Tanreqing. Compared the treatment efficiency, sputum culture negative conversion rate and the difference of liver and kidney damage between the two groups.

Results: There was no significant difference in sputum culture negative conversion rate between the treatment group (36 cases, 85.71%) and the control group (41 cases, 82%) after treatment. Symptom scores of two groups after treatment were lower than those before treatment, and the difference was statistically significant ($P < 0.05$), the symptom scores (85.62 ± 11.37) in treatment group after treatment were lower than those in control group (12.38 ± 91.25), and the difference was statistically significant ($P < 0.05$). In the treatment group after treatment, 2 cases (4.76%) were cured, 26 cases were markedly effective (61.90%), 10 cases were effective (23.81%), and 4 cases (9.52%) were ineffective; in the control group, 1 cases (2%) were cured, 17 cases (34%) were markedly effective, 22 cases (44%) were effective, and 10 cases (20%) were ineffective; the efficiency in the treatment group was significantly better than that in the control group, and the difference was statistically significant ($P < 0.05$). 14 cases occurred liver and kidney damage in the treatment group after the treatment, and 11 cases in the control group, there was no significant difference in the incidence of liver and kidney damage after treatment between the two groups ($P > 0.05$). **Conclusion:** Without affecting the sputum culture negative conversion rate and increasing the burden of liver and kidney, traditional Chinese medicine treatment of the elderly patients with acute COPD complicated with pulmonary tuberculosis infection in general treatment, the curative effect was more significant.

Keywords chronic obstructive pulmonary disease (COPD); pulmonary tuberculosis; promoting the collaterals and dispersing phlegm; effective; liver and kidney function damage

慢性阻塞性肺疾病(chronic obstructive lung disease, COPD)的主要特点是不完全可逆的气流阻塞,主要临床表现有咳痰、慢性咳嗽、喘息、呼吸困难及胸闷等,还可伴有肺结核等并发症^[1]。该疾病病死率高、患病人数多、经济负担重,已成为威胁人民健康的慢性呼吸系统疾病。现阶段COPD的发病机制尚不明确,一般采取西医对症治疗,虽取得了一定效果,但无法较好地保护患者的肺功能。

随着中医对COPD认识的提高,其中痰、虚、瘀在COPD发病过程的重要地位得到了人们的普遍认可,认为COPD的主要发病机制是痰阻、气虚及血瘀,其中气虚血瘀可表现在COPD发病的各时期,痰浊塞肺是发作期的主要表现,临床应用中药治疗COPD也取得了满意的疗效^[2]。故此,为进一步研究补肺通络化痰方对COPD急性期合并肺结核感染的治疗效果,本研究将我院收治的老年COPD急性期合并肺结核感染的患者根据是否接受痰热清治疗随机分为治疗组和对照组,比较两组患者治疗有效率、痰培养阴转率以及肝肾损害情况的差异,取得了较好的结果。现报道如下。

1 资料与方法

1.1 研究对象

选取2014年2月至2016年2月我院收治的老年

慢性阻塞性肺疾病急性期合并肺结核感染的患者92例,其中男性52例,女性40例,年龄63~89岁,平均年龄(65.25 ± 6.31)岁,病例纳入标准:1)经临床、影像学检查和肺功能测定并且痰培养阳性诊断为COPD急性期合并肺结核的患者,且所有患者均为初治肺结核患者;2)患者的依从性较好,能按规定坚持服药无退出者;3)本研究取得医学伦理委员会的批准,与患者签订了知情同意书。病例排除标准:1)合并有恶性肿瘤、严重肝肾疾病和免疫系统疾病的患者;2)合并有糖尿病、硅沉着病或艾滋病的患者;3)孕妇和哺乳期妇女,依从性差或中途退出者。

1.2 分组和临床资料

92例入选的患者被随机分为两组,42例治疗组患者接受COPD对症支持治疗和抗肺结核治疗的同时给予痰热清治疗,其中男性25例,女性17例,平均年龄(66.17 ± 6.89)岁,痰培养均为阳性,临床症状:咳嗽咳痰42例,咳血痰中带血9例,胸痛8例,发热盗汗17例,消瘦乏力21例,呼吸衰竭18例;50例对照组患者接受COPD对症支持治疗和抗肺结核治疗,其中男性27例,女性23例,平均年龄(66.83 ± 6.05)岁,痰培养均为阳性,临床症状:咳嗽咳痰50例,咳血痰中带血12例,胸痛7例,发热盗汗20例,消瘦乏力17例,呼吸衰竭22例;两

组患者一般资料的差异无统计学意义($P>0.05$)。

1.3 治疗方法

对照组单纯给予化痰、抗感染及解痉平喘等西医对症治疗。治疗组在对照组基础上给予痰热清(国药准字Z20030054, 上海凯宝药业股份有限公司)治疗。主要为熊胆粉、黄芩、山羊角、连翘及金银花。一次20 mL, 加入5%葡萄糖注射液300~500 mL, 静脉滴注, 每分钟不超过60滴, 每天1次。两组患者治疗疗程均为2周。

1.4 疗效分级标准

根据患者治疗前后症状评分^[3]进行判断, 其疗效指数为(治疗前评分-治疗后评分)/治疗前评分 $\times 100\%$; 其中痊愈为痰培养转阴, 症状体征基本消失, 疗效指数 $\geq 90\%$; 显效为痰培养转阴, 症状体征明显改善, 疗效指数 $\geq 60\%$; 有效为痰培养转阴或未转阴, 症状体征有所改善, 疗效指数 $\geq 30\%$; 无效为痰培养未转阴, 症状体征未改善或加重, 疗效指数 $< 30\%$ 。

1.5 统计学处理

用SPSS16.0统计分析软件进行数据分析, 症状积分用均数和标准差($\bar{x}\pm s$)表示, 两独立样本 t 检验用于治疗组和对照的差异比较, 配对 t 检验用于两组治疗前后的差异比较; 痰培养阴转率、治疗有效率、肝肾损害率用百分率(%)表示, 卡方检验用于两组痰培养阴转率和肝肾损害率比较, 秩和检验用于两组治疗有效率比较; $P<0.05$ 时有统计学差异。

2 结果

2.1 两组患者治疗后痰培养阴转率比较

治疗组患者治疗后痰培养阴转36例, 阴转率为85.71%; 对照组患者治疗后痰培养阴转41例, 阴转率为82.0%; 两组患者治疗后痰培养阴转率的差异无统计学意义($P>0.05$)。见表1。

2.2 两组患者治疗前后症状积分比较

两组患者治疗前的症状积分无统计学差异($P>0.05$), 两组患者治疗后的症状积分均低于治疗前, 且差异具有统计学差异($P<0.05$), 治疗组治疗后的症状积分(85.62 ± 11.37)低于对照组(91.25 ± 12.38), 且差异具有统计学差异($P<0.05$)。见表2。

2.3 两组患者治疗后有效率比较

治疗组治疗后痊愈2例(4.76%), 显效26例(61.90%), 有效10例(23.81%), 无效4例(9.52%); 对照组治疗后痊愈1例(2.0%), 显效17例(34.0%), 有效22例(44.0%), 无效10例(20.0%); 治疗组治疗疗效明显优于对照组, 且差异具有统计学意义($P<0.05$)。见表3。

2.4 两组患者治疗后肝肾损害情况比较

治疗组治疗后发生肝脏损害9例(21.43%), 发生肾脏损害5例(11.90%); 对照组治疗后发生肝脏损害5例(11.90%), 发生肾脏损害6例(12.0%); 两组患者治疗后肝肾损害发生率的差异无统计学意义($P>0.05$)。见表4。

表1 两组患者治疗后痰培养阴转率比较

Table 1 Comparison of sputum culture negative conversion rate between two groups after treatment

分组	例数	转阴	未转阴	转阴率/%
治疗组	42	36	6	85.71
对照组	50	41	9	82.0
χ^2	-	-	-	0.23
P	-	-	-	0.63

表2 两组患者治疗前后症状积分比较($\bar{x}\pm s$)

Table 2 Comparison of symptom scores before and after treatment in two groups ($\bar{x}\pm s$)

分组	例数	治疗前	治疗后	t	P
治疗组	42	102.75 \pm 15.64	85.62 \pm 11.37	5.74	<0.001
对照组	50	104.26 \pm 13.17	91.25 \pm 12.38	5.09	<0.001
t	-	0.50	2.26	-	-
P	-	0.57	0.03	-	-

表3 两组患者治疗后有效率比较 [n (%)]

Table 3 Comparison of the effective rate of two groups after treatment [n (%)]

分组	n	痊愈	显效	有效	无效
治疗组	42	2 (4.76)	26 (61.90)	10 (23.81)	4 (9.52)
对照组	50	1 (2.0)	17 (34.0)	22 (44.0)	10 (20.0)
Z	-	-	-	-	2.89
P	-	-	-	-	0.005

表4 两组患者治疗后肝肾损害情况比较 [n (%)]

Table 4 Comparison of liver and kidney damage after treatment in two groups [n (%)]

分组	n	肝脏损害	肾脏损害
治疗组	42	9 (21.43)	5 (11.90)
对照组	50	7 (14.0)	6 (12.0)
χ^2	-	0.88	0.001
P	-	0.35	0.99

3 讨论

COPD及肺结核均为老年常见病和多发病,当二者合并存在时,漏诊、误诊率高,治疗效果较差,由于国内老龄化加剧,老年COPD合并肺结核感染的发病率随之上升^[4-5]。老年COPD合并肺结核感染主要原因有以下特点^[6-7]: 1)部分老年人先前感染过结核杆菌,由于激素等药物的使用,使自身免疫功能受损,潜伏在体内结核病灶重新活跃起来; 2)老年人免疫力下降, COPD造成患者呼吸道反复感染,使呼吸道免疫功能受损,感染结核概率升高; 3)长期吸烟是造成肺结核复发的重要因素,吸烟者支气管胶原蛋白和弹性蛋白的完整性受到破坏,金属蛋白酶水平下降且巨噬细胞分泌大量TNF- α ,故此吸烟者易患COPD及肺结核。Jia等^[8-9]研究发现COPD合并肺结核具有以下特点: 1)COPD症状较典型,但合并肺结核后结合症状易被忽略或掩盖,出现咳嗽、胸闷及气喘等症状,而无乏力、低热及盗汗等结核症状,故两病合并时易被漏诊而延误治疗; 2)COPD合并肺结核患者胸部X线片显示斑片状阴影与肺炎相似度较高,易造成误诊; 3)肺外结核发病率较高; 4)老年COPD合并肺结核一般病情急且重,易出现各器官功能障碍甚至衰竭,导致患者死亡。

现阶段COPD的发病机制尚不明确,一般采用西药对症治疗,虽然具有较好疗效,但是无法阻止肺功能下降趋势^[10]。随着中医对COPD认识的提高, COPD的中药治疗取得了长足的发展。现代中医认为COPD多因痰瘀互阻、久病肺虚,每感外邪

可加重病情^[11]。痰和瘀既是导致疾病发生,发展和加重病情的重要因素,又是疾病发展过程中的重要病理产物,肺虚则是导致疾病的内因^[12]。肺乃COPD发病之首,外邪可从皮毛、口鼻入侵,先犯肺,致使肺气不利宣降,升降失常为喘,上逆为咳,咳喘久之则伤元气致肺气虚,肺病及脾,脾运失常,可致肺脾两虚^[13]。肾乃气之根,肺乃气之主,肺病伤及肾,肾气不足,摄纳无权则短气难接;肺主气,通心脉,肺气可辅心脉运行,肺虚治节失守则循环不利,血行瘀积,肺脉堵塞致血滞气虚,病及于心,出现水肿、心悸及舌质紫暗等瘀血症状^[14]。

本研究在给予常规化痰、抗感染及解痉平喘等西医对症治疗同时加用痰热清治疗,该方药主要由熊胆粉、黄芩、山羊角、连翘及金银花组成。方中熊胆粉化痰活血,凉血消痛,除烦安神;山羊角可益气固表,味甘微温,升阳举陷,入脾肺经,健脾补中;金银花清热解毒,抗菌消炎效果显著;黄芩善清泻上焦实热及肺热;连翘解毒效果较高。调和诸药,全方合用共奏清热解毒、甘润苦降,利肺止咳、通络化痰之效^[15]。

本研究结果显示两组患者治疗后的症状积分均低于治疗前,且差异具有统计学意义($P < 0.05$),治疗组治疗后的症状积分低于对照组,且差异具有统计学意义($P < 0.05$)。治疗组治疗后痊愈2例,显效26例,有效10例,无效4例;对照组治疗后痊愈1例,显效17例,有效22例,无效10例;治疗组治疗疗效明显优于对照组,且差异具有统计学意义($P < 0.05$)。上述结果说明常规西药治疗加用痰热

清治疗效果更好, 治疗有效率明显升高, 各症状得到了明显改善。研究中还发现治疗组治疗后发生肝肾损害14例, 对照组11例, 两组患者治疗后肝肾损害发生率的差异无统计学意义($P>0.05$)。该结果提示加用痰热清治疗不会增加肝肾负担, 安全性较高, 具有临床应用价值。

综上所述, 在不影响痰培养阴转率和不加重肝肾负担的情况下, 老年COPD急性期合并肺结核感染患者接受一般性治疗的同时进行中医治疗, 其疗效更为显著。

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