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中医序贯疗法联合丙酸氟替卡松鼻喷雾剂治疗慢性鼻窦炎的疗效评估*

陈永禄¹ 温丽慧² 刘海媚¹ 周丹¹ 谢友琴¹

(1 北京中医药大学深圳医院耳鼻喉科 北京 518172; 2 广西钦州市第二人民医院耳鼻喉科 广西 钦州 535000)

摘要 目的:探讨中医序贯疗法联合丙酸氟替卡松鼻喷雾剂治疗慢性鼻窦炎的临床疗效。**方法:**选择2017年8月至2019年2月在我院接受治疗的120例慢性鼻窦炎II型患者,采用抽签法分为观察组(n=61)和对照组(n=59)。两组均给予功能性内镜鼻窦手术治疗,对照组给予丙酸氟替卡松鼻喷雾剂治疗,观察组在对照组的基础上给予中医序贯疗法治疗。比较两组患者的临床疗效,治疗前后鼻黏膜纤毛传输速率(MTR)、血清白细胞介素4(IL-4)、白细胞介素6(IL-6)、肿瘤坏死因子(TNF- α)、中医症候积分水平的变化情况以及并发症的发生情况。**结果:**治疗后,两组总有效率分别为96.72%,79.66%,观察组显著高于对照组($P<0.05$);两组MTR、血清IL-4、IL-8、TNF- α 水平均较治疗前显著改善,且观察组MTR高于对照组,血清IL-4、IL-8、TNF- α 水平明显低于对照组($P<0.05$);两组中医症候积分水平均较治疗前显著降低,且观察组中医症候积分水平显著低于对照组($P<0.05$)。治疗期间,两组并发症总发生率分别为1.64%、15.25%观察组显著低于对照组($P<0.05$)。**结论:**中医序贯疗法联合丙酸氟替卡松鼻喷雾剂慢性鼻窦炎患者的临床效果显著优于丙酸氟替卡松鼻喷雾剂治疗,其可更有效改善患者MTR。减轻炎症反应,且安全性更高。

关键词:中医序贯疗法;丙酸氟替卡松鼻喷雾剂;慢性鼻窦炎;鼻黏膜纤毛传输速率;炎症因子

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Curative Efficacy of Sequential Therapy of Traditional Chinese Medicine Combined with Fluticasone Propionate Nasal Spray in the Treatment of Chronic Sinusitis*

CHEN Yong-lu¹, WEN Li-hui², LIU Hai-mei¹, ZHOU Dan¹, XIE You-qin¹

(1 Department of Otolaryngology, Shenzhen Hospital, Beijing University of traditional Chinese Medicine, Beijing, 518172, China;

2 Department of Otolaryngology, the second people's Hospital of Qinzhou, Qinzhou, Guangxi, 535000, China)

ABSTRACT Objective: To study the curative efficacy of sequential therapy of traditional Chinese medicine combined with fluticasone propionate nasal spray in the treatment of Chronic sinusitis and its effects on the Nasal mucosa ciliary transmission rate (MTR) and inflammatory factors. **Methods:** 120 patients with type II chronic sinusitis treated in our hospital from August 2017 to February 2019 were selected and divided into the observation group (n=61) and the control group (n=59) by lottery. Both groups were treated with functional endoscopic sinus surgery, the control group was treated with fluticasone propionate nasal spray, and the observation group was treated with sequential therapy of traditional Chinese medicine on the basis of control group. The clinical efficacy, changes in nasal mucosa ciliary transport rate (MTR), serum interleukin 4(il-4), interleukin 6(il-6), tumor necrosis factor- α (TNF- α), and score of TCM symptoms and incidence of complications before and after treatment were compared between two groups. **Results:** After treatment, the total effective rates of the two groups were 96.72% and 79.66%, respectively, which were significantly higher in the observation group than that in the control group ($P<0.05$). The levels of MTR, serum IL-4, IL-8 and TNF- α in both groups were significantly improved compared with those before treatment, and the levels of serum IL-4, IL-8 and TNF- α in the observation group were significantly lower than those in the control group ($P<0.05$). The score level of TCM symptoms in both groups was significantly lower than that before treatment, and the score level of TCM symptoms in the observation group was significantly lower than that in the control group ($P<0.05$). During the treatment period, the total incidence of complications in the two groups was 1.64% and 15.25%, respectively, which was significantly lower in the observation group than that of the control group ($P<0.05$). **Conclusion:** The clinical effect of sequential therapy combined with fluticasone propionate nasal spray in the treatment of patients with chronic sinusitis is significantly better than that of fluticasone propionate nasal spray, which can more effectively improve the MTR and reduce inflammation with higher safety.

Key words: Sequential therapy of Chinese medicine; Fluticasone propionate nasal spray; Chronic sinusitis; Transmission rate of nasal mucosa cilia; Inflammatory cytokines

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作者简介:陈永禄(1979-),男,本科,主治医师,研究方向:耳鼻咽喉科学,E-mail: liuxuelu307@163.com

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前言

慢性鼻窦炎是临床耳鼻喉科常见的鼻部持续性病变,大多数患者是由鼻窦内的多种细菌造成的感染引发,临床表现为鼻塞、头痛、嗅觉减退、头昏等,病程较长,可长达数年甚至数十年,反复发作,很难根治痊愈,严重影响患者的生活质量^[1-3]。丙酸氟替卡松是过敏性鼻炎中常用的外用糖皮质激素,具有较强的抗炎作用,但其单一治疗效果一般^[4-5]。

近年来,中医在改善慢性鼻窦炎临床症状中具有一定的优势。中医学认为鼻居面中,为阳中之阳,是一身血脉所经,又处于清阳交会处,故脏腑经络与鼻有着密切的联系,鼻炎在中医上称之为“鼻渊”,鼻如渊泉,涓泪流涕^[6-8]。有研究显示炎症因子水平的升高可促使B淋巴细胞大量合成,在慢性鼻窦炎发展过程中对免疫细胞起趋化作用^[9]。因此,本研究主要探讨了中医序贯疗法联合丙酸氟替卡松喷雾剂对慢性鼻窦炎患者的疗效和安全性。

1 资料与方法

1.1 一般资料

选择2017年8月至2019年2月我院收治的120例慢性鼻窦炎患者进行研究。采用抽签法将其分为2组,观察组61例,男33例,女28例,年龄20~55岁,平均(39.36±3.25)岁,病程2~10年,平均(6.59±2.54)年;对照组59例,男31例,女28例,年龄21~56岁,平均(39.41±3.32)岁,病程2~9年,平均(6.52±2.51)年。两组基线资料无明显统计学差异,具有可比性。

1.2 诊断标准

1.2.1 西医诊断标准 参照《慢性鼻窦炎诊断和治疗指南》^[10],(1)鼻塞、脓涕的症状反复发作;(2)咽干、头痛、嗅觉障碍等临床症状;(3)影像检查鼻腔黏膜充血;(4)下鼻甲不平、充血;(5)鼻镜检查下鼻甲后端肥大、黏膜肥厚。

1.2.2 中医诊断标准 参照《中医耳鼻喉科学》^[11]中肺脾气虚型中诊断标准,(1)主症表现为畏寒气短,流涕鼻塞;(2)次症表现为倦怠乏力,少气懒言;(3)舌淡,苔白,脉细弱。

1.3 纳入标准和排除标准

纳入标准:(1)符合上述诊断标准;(2)年龄>18岁;(3)无明显药物过敏史;(4)近期末使用激素类药物者;(5)签署知情同意书。排除标准:(1)严重肝肾疾病者;(2)患有意识障碍、精神障碍者;(3)伴有恶性肿瘤患者;(4)妊娠、围产、哺乳期妇女的患者;(5)严重脑血管疾病;(6)未按规定用药;(7)晕针者;(8)鼻腔结构性疾病者。

1.4 治疗方法

两组患者入院后由同一手术医师行功能性内镜鼻窦。术后7d在鼻内镜引导下进行患者的术腔清理,清除患者术腔的脓性分泌物、松动的痂皮等鼻部组织,并小心冲洗上颌窦从而清除上颌窦腔内的分泌物和积血。根据不同的时期,定期复查,重点解决慢性鼻窦炎的相关病变,在早期及时清理痂皮,吸出窦腔内的积血,在中期清除肉芽和囊泡,在后期则分离粘连带,防止窦口闭锁等。手术治疗,术后采用膨胀止血海绵填塞止血;对照组患者给予丙酸氟替卡松喷雾剂;丙酸氟替卡松喷雾剂(规格:每喷含丙酸氟替卡松50微克,药液浓度0.05%,生产厂家:Glaxo Wellcome, S.A., 国药准字:H20140117)喷鼻,1侧2次,每d1~2次,持续3个月。观察组在对照组的基础上加用中医序贯疗法:术后1月内服中药,方为:白芷、甘草、黄芪、冬瓜仁、苍耳子、金银花、党参、薄荷、防风、辛夷花、天花粉、白术。用法用量:每日1剂,水煎2次,分2次饭后温服。术后第2月行穴位埋线治疗:用6号注射针头剪去针尖作芯,9号一次性无菌注射针作套管,将羊肠线剪成1~1.5cm长的线段。定穴后,带无菌手套,消毒后,垂直刺入穴位,左手推针芯,右手退针管,将羊肠线埋植在穴位的肌层内,深约1.5~2cm。10天1次,5次为1疗程。

1.5 观察指标

采集治疗前、治疗肘静脉血4mL,3500 r·min⁻¹离心10min,提取血清,采用双抗体夹心酶联免疫吸附法测定IL-4、IL-6、TNF-α水平;鼻黏膜纤毛传输速率:采用鼻压计进行测定;症状积分:根据术前体征积分和术后鼻内镜检查积分,患者主要症状为鼻塞、头痛、头晕、嗅觉减退、鼻涕。按无症状、轻度、较重、极重分别记为0、1、2、3分;观察记录两组并发症发生情况。

疗效评定标准:显效:临床症状消失,鼻内镜检查良好,无脓性分泌物,窦腔黏膜上皮化;有效:临床症状明显改善,鼻内镜检查部分区域肉芽组织形成,少量脓性分泌物;无效:临床症状无改善。

1.6 统计学分析

以spss18.0软件包处理数据,符合正态分布计量资料用均数±标准差($\bar{x} \pm s$)表示,组间比较使用独立样本t检验,计数资料以率表示,组间比较采用 χ^2 检验,以 $P < 0.05$ 表示差异具有统计学意义。

2 结果

2.1 两组临床疗效比较

治疗后,两组总有效率分别为96.72%,79.66%,观察组显著高于对照组($P < 0.05$),见表1。

表1 两组临床疗效比较[例(%)]

Table 1 Comparison of the clinical efficacy between the two groups[n(%)]

| Groups | n | Excellent | Valid | Invalid | Total effective rate |
|-------------------|----|-----------|-----------|-----------|----------------------|
| Observation group | 61 | 26(42.62) | 33(54.10) | 2(3.28) | 59(96.72) |
| Control group | 59 | 21(35.59) | 26(44.07) | 12(20.34) | 47(79.66) |
| χ^2 value | | | | | 8.470 |
| P value | | | | | 0.004 |

2.2 两组治疗前后 MTR、血清炎症因子水平的比较

治疗后,两组 MTR、血清 IL-4、IL-8、TNF- α 水平均较治疗

前显著改善,且观察组 MTR 高于对照组,血清 IL-4、IL-8、TNF- α 水平低于对照组($P<0.05$),见表 2。

表 2 两组治疗前后 MTR、血清炎症因子水平的比较($\bar{x}\pm s$)

Table 2 Comparison of the MTR and serum levels of inflammatory factors between the two groups before and after treatment($\bar{x}\pm s$)

| Groups | n | MTR(mm/min) | | IL-4(pg/mL) | | IL-6(ng/L) | | TNF- α (ng/mL) | |
|-------------------|----|----------------------|-----------------|----------------------|--------------------|----------------------|-----------------|-----------------------|-----------------|
| | | Before the treatment | After treatment | Before the treatment | After treatment | Before the treatment | After treatment | Before the treatment | After treatment |
| Observation group | 61 | 2.35 \pm 0.31 | 7.18 \pm 1.21 | 182.47 \pm 25.04 | 89.01 \pm 9.35 | 15.47 \pm 3.81 | 5.12 \pm 1.51 | 3.85 \pm 0.61 | 1.24 \pm 0.41 |
| Control group | 59 | 2.36 \pm 0.29 | 5.67 \pm 1.08 | 182.63 \pm 25.12 | 112.23 \pm 16.54 | 15.52 \pm 3.85 | 8.26 \pm 2.84 | 3.88 \pm 0.65 | 2.61 \pm 0.54 |
| t value | | 0.182 | 7.204 | 0.035 | 9.507 | 0.071 | 7.597 | 0.261 | 15.685 |
| P value | | 0.856 | 0.000 | 0.972 | 0.000 | 0.943 | 0.000 | 0.795 | 0.000 |

2.3 两组治疗前后中医症候积分比较

治疗前,两组中医症候积分水平无显著差异($P>0.05$);治疗

后,两组中医症候积分水平均较治疗前显著改善,且观察组中医症候积分显著低于对照组($P<0.05$),见表 3。

表 3 两组治疗前后中医症候积分的比较($\bar{x}\pm s$,分)

Table 3 Comparison of the TCM symptom scores between the two groups before and after treatment($\bar{x}\pm s$, points)

| Groups | n | A stuffy nose | | Headache, dizziness | | Hyposmia | | Your nose | |
|-------------------|----|----------------------|-----------------|----------------------|-----------------|----------------------|-----------------|----------------------|-----------------|
| | | Before the treatment | After treatment | Before the treatment | After treatment | Before the treatment | After treatment | Before the treatment | After treatment |
| Observation group | 61 | 6.58 \pm 0.87 | 1.02 \pm 0.31 | 1.89 \pm 0.62 | 0.34 \pm 0.14 | 1.56 \pm 0.42 | 0.29 \pm 0.11 | 2.15 \pm 0.61 | 0.34 \pm 0.15 |
| The control group | 59 | 6.61 \pm 0.89 | 1.95 \pm 0.42 | 1.91 \pm 0.65 | 0.75 \pm 0.28 | 1.55 \pm 0.41 | 0.74 \pm 0.28 | 2.18 \pm 0.62 | 0.85 \pm 0.34 |
| t value | | 0.187 | 13.833 | 0.173 | 10.195 | 0.132 | 11.658 | 0.267 | 10.690 |
| P value | | 0.852 | 0.000 | 0.863 | 0.000 | 0.895 | 0.000 | 0.789 | 0.000 |

2.4 两组并发症发生情况的比较

两组并发症总发生率为 1.64%、15.25%, 观察组显著低于

对照组($P<0.05$),见表 4。

表 4 两组并发症发生情况的比较[例(%)]

Table 4 Comparison of the incidence of complications between the two groups[n(%)]

| Groups | n | Infection | Cavity adhesion | Emphysema | The total incidence of |
|-------------------|----|-----------|-----------------|-----------|------------------------|
| Observation group | 61 | 0 | 1 | 0 | 1(1.64) |
| Control group | 59 | 2 | 4 | 3 | 9(15.25) |
| χ^2 value | | | | | 7.278 |
| P value | | | | | 0.007 |

3 讨论

慢性鼻窦炎是临床常见疾病,多与患者变态反应体质、机体抵抗力下降及鼻窦引流受阻有关,大多数慢性鼻窦炎患者无明显的全身症状,一般表现为不同程度的易疲惫、记忆力下降及头昏、鼻塞、流脓涕、嗅觉减退,严重影响患者的生活质量^[12,13]。目前,针对慢性鼻窦炎的发病原因,中西医专家有着不同的见解。西医认为慢性鼻窦炎发病原因多为急性鼻窦炎没有得到及时治疗或由于感冒反复发作没有治愈所引起的,且与先天性的遗传因素密切相关,有半数以上的患者双亲曾经一定也有过这种病史^[14-16]。丙酸氟替卡松鼻喷雾剂能抑制 T 淋巴细胞及嗜酸性粒细胞,对慢性鼻窦炎有一定的疗效,但该药一旦停药则容

易复发,需联合其他药物联合治疗,以提高治疗效果^[17-19]。

近年来,随着中医药技术的发展,中西医结合广泛应用于慢性鼻窦炎中的治疗^[20,21]。中医认为慢性鼻窦炎是一种虚证,由于肺脾气虚,邪灵滞留鼻道,最终无法治愈,应配合扶正固本、排脓祛邪的排脓汤治疗^[22,23]。本研究中所用汤剂中黄芪和白术均具有扶正固本、益气健脾的效果,全方共奏具有补元、固本、扶正、祛邪之效果^[24,25]。结果显示联合治疗的总有效率明显高于对照组,且并发症更低,提示中西医结合可明显提高慢性鼻窦炎患者的治疗效果,且安全性高。

研究显示慢性鼻窦炎患者炎症因子水平高于健康人群,鼻黏膜附近有大量的嗜酸性细胞集聚,进而增加了鼻窦炎的炎性^[26,27]。IL-4 能促使抗原或丝裂原活化的 b 细胞分裂增殖,增强

巨噬细胞的功能,在某些过敏反应性疾病发生中具有一定的意义;IL-6 属于一种细胞因子,能调节 T 细胞和中性粒细胞,促进机体免疫应答功能;TNF- α 是一种能直接杀伤肿瘤细胞的细胞因子,由巨噬细胞分泌的一种小分子蛋白,能够活化的 T 淋巴细胞分泌^[28,29]。有研究显示减少降低血清炎症因子可减轻鼻窦炎的炎症反应,提高治疗效果^[30]。本研究结果显示联合治疗的患者 MTR 高于对照组,炎症因子水平及中医症候积分水平低于对照组。分析其原因可能是因为患者发生慢性鼻窦炎后导致 B 细胞因子分泌增加,进而影响 IL-6 等因子水平上升,而丙酸氟替卡松喷雾剂是糖皮质激素类药物,能拮抗鼻黏膜变态反应,抑制嗜酸性粒细胞聚集,从而阻断炎症反应过程;而排脓汤可抑制上呼吸道常见细菌和流感病毒,改善组织粘膜局部血液循环,从而发挥抗炎作用。

综上所述,中医序贯疗法联合丙酸氟替卡松鼻喷雾剂慢性鼻窦炎患者的临床效果显著优于丙酸氟替卡松鼻喷雾剂治疗,其可更有效改善患者 MTR。减轻炎症反应,且安全性更高。

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