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功能性鼻内窥镜手术治疗鼻窦炎与鼻窦炎的疗效分析

杨少峰¹ 赵和平² 龚继涛¹ 郑海明¹ 刘鲜妮¹

(1 宝鸡市中医医院耳鼻喉科 陕西 宝鸡 721004; 2 西安交通大学医学院附属红会医院检验科 陕西 西安 710054)

摘要 目的:探讨功能性鼻内窥镜手术治疗鼻窦炎与鼻窦炎的疗效。方法:选取 350 例鼻窦炎与鼻窦息肉患者,按随机数字表法分为两组,对照组(164 例)给予综合疗法,观察组(186 例)给予功能性鼻内窥镜手术联合综合疗法。通过观察并记录疗效,治疗前,治疗后 3 个月患者体内 IL-1, IL-8 水平, SF-36 量表评分,评价功能性鼻内窥镜手术治疗鼻窦炎与鼻窦炎的疗效。结果:经手术和药物治疗,观察组有效率明显高于对照组($P<0.05$),治疗前,两组 IL-1 和 IL-8 水平无统计学差异($P>0.05$),治疗后 3 个月,两组 IL-1 和 IL-8 水平均明显下降,且观察组 IL-1 和 IL-8 水平低于对照组($P<0.05$),治疗前,两组 SF-36 各项评分无统计学差异,治疗后 3 个月,两组 SF-36 评分均明显增加($P<0.05$)。观察组在躯体疼痛和总体健康 2 项评分明显高于对照组($P<0.05$),其余 6 项评分相比无统计学差异($P>0.05$)。结论:功能性鼻内窥镜手术对鼻窦炎与鼻窦息肉具有较好的疗效,能显著减轻炎症反应,改善患者生活质量,值得临床推广使用。

关键词: 功能性鼻内窥镜手术;鼻窦炎;鼻窦息肉;炎症反应;生活质量

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Effective Analysis of Functional Endoscopic Sinus Surgery in Treatment of Sinusitis and Nasal Polyps

YANG Shao-feng¹, ZHAO He-ping², GONG Ji-tao¹, ZHENG Hai-ming¹, LIU Xian-ni¹

(1 Department of Otorhinolaryngology, Baoji City Chinese Medicine Hospital, Baoji, Shaanxi, 721004, China; 2 Department of laboratory, The Red Cross Hospital Affiliated to Medical College of Xi'an Jiao Tong University, Xi'an, Shaanxi, 710054, China)

ABSTRACT Objective: To investigate the curative effect of functional endoscopic sinus surgery in treatment of sinusitis and nasal polyps. **Methods:** 350 cases of patients with sinusitis and nasal polyps were selected and randomly divided into two groups. The control group (164 cases) was given comprehensive treatment. The observation group (186 cases) was given functional endoscopic sinus surgery combined with comprehensive treatment. The effect of functional endoscopic sinus surgery in treatment of sinusitis and nasal polyps was evaluated by efficacy, IL-1, IL-8 level and SF-36 scores before treatment, 3 months after treatment. **Results:** After surgery and medicine treatment, the effective rate of observation group was higher in observation group than that of the control group ($P<0.05$). Before treatment, there were no statistical significance in IL-1, IL-8 level between two groups ($P>0.05$). 3 months after treatment, the IL-1 and IL-8 level were decreased in two groups. The IL-1 and IL-8 level of observation group was lower than that of the control group ($P<0.05$). Before treatment, there was no statistical significance in SF-36 scores. 3 months after treatment, the SF-36 scores were increased in two groups ($P<0.05$). The physical pain and health scores of observation group were higher than those of the control group ($P<0.05$). And the other 6 scores were not statistically significant ($P>0.05$). **Conclusions:** The functional endoscopic sinus surgery has a good effect on sinusitis and nasal polyps, it could reduce the inflammatory reaction, improve the quality of life, s worthy of clinical application.

Key words: Functional endoscopic sinus surgery; Sinusitis; Nasal polyps; Inflammatory response; Quality of life

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前言

鼻窦炎与鼻窦息肉是耳鼻喉科常见病,鼻窦炎分急慢性两类,急性鼻窦炎多由上呼吸道感染引起,慢性鼻窦炎致病原因较为复杂^[1,2]。保守治疗和传统鼻窦手术疗效不佳,复发率较高,而功能性鼻内窥镜手术由于创伤小,手术视野清晰,病变切除彻底,对鼻腔鼻窦生理功能影响小等优点,被广泛用于鼻窦炎

与鼻窦息肉的治疗,然而功能性鼻内窥镜手术作为较为先进的技术,仅在条件较好的医院有所开展^[3,4]。为了论证功能性鼻内窥镜手术对鼻窦炎与鼻窦息肉的疗效,我院自 2012 年 1 月 -2015 年 1 月选取了 350 例鼻窦炎与鼻窦息肉患者,报道如下。

1 资料与方法

1.1 病例资料

选取鼻窦息肉伴鼻窦炎患者 350 例,年限:2012 年 1 月 -2015 年 1 月,均为我院耳鼻喉科诊治患者,入组标准:① 均符合鼻窦炎与鼻窦息肉的诊断标准^[5,6];② 所选病例伴有不同程度的鼻塞、头痛、流涕等症状;③ 经本院伦理委员会同意,治疗前每

作者简介:杨少峰(1970-),男,本科,主治医师,研究方向:耳鼻喉方面, E-mail: yangshaofeng_197011@medpap360.net, 电话:13186399683

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位患者均签署书面知情书。排除标准:过敏性鼻炎、精神类疾病、自身免疫学疾病患者。按随机数字表法将患者分为两组,对照组(164例)给予综合疗法,其中,男86例,女78例,平均年龄(36.7 ± 12.2)岁,平均病程(14.6 ± 5.6)月;观察组(186例)给予功能性鼻内窥镜手术联合综合疗法,其中,男100例,女86例,平均年龄(37.6 ± 11.8)岁,平均病程(15.5 ± 6.4)月。

1.2 手术方法

对照组:采用综合疗法,给予丙酸氟替卡松鼻喷雾剂(葛兰素史克,注册证号:H20140117)喷鼻,200 μ g/d,口服依托红霉素片(西安汉丰药业有限责任公司,批准文号:国药准字H61023361),200 mg/d,口服黏液溶解剂标准桃金娘油肠溶胶囊(德国希尔,注册证号:Z20100008),150 mg/次,2次/d,0.9%生理盐水鼻腔冲洗,1次/d。连续应用14 d。

观察组:采用Messerklinger术式,患者取仰卧位,气管插管静脉复合麻醉,手术操作原则:纠正鼻腔解剖学异常和影响鼻通气的病变,例如鼻息肉。对息肉较多阻碍中鼻道者,予以手术切除的同时注意保护鼻腔、鼻窦黏膜。先用吸切器吸切鼻腔的息肉组织,再使用钩突刀沿钩突切开并切除,然后开放并扩大上颌窦口,术中结合术前鼻窦CT及术中探查情况,根据情况酌情开放额窦,后筛窦及蝶窦。

术后处理:术后鼻腔填塞凡士林纱条或明胶海绵止血,术后24-72 h抽除鼻腔填塞物,生理盐水冲洗鼻腔,术后1周给予综合疗法,药物种类与剂量同对照组一致。

1.3 观察指标

① 疗效:根据1997年海口会议制定的慢性鼻窦炎鼻息肉临床分型分期及内窥镜鼻窦手术疗效评定标准判定疗效,分为治愈,好转,无效,疗效越好,临床症状改善越明显,鼻窦窦口开口良好,脓性分泌物越少。② 炎症因子IL-1, IL-8:治疗前,治疗后3个月取患者病变鼻黏膜为标本,免疫组化法测量IL-1, IL-8水平。③ 生活质量:采用SF-36量表对患者治疗前,治疗后3个月的生活质量进行判定, SF-36量表包括生理功能,生理职能,躯体疼痛,一般健康,活力,社会功能,情感职能,精神健康等8个方面,每个项目得分越高,说明患者在该项目的身体健康或精神健康越接近正常水平。

1.4 统计方法

采用SPSS 17.0统计软件分析,数据以 $\bar{x} \pm s$ 表示,组内治疗前与治疗后相比采用配对t检验,组间比较采用两独立样本t检验,计数资料采用秩和或卡方检验,以 $P < 0.05$ 为差异有统计学意义。

2 结果

2.1 疗效比较

经手术和药物治疗,观察组有效率为96.8%,对照组为85.4%,观察组治疗有效率明显高于对照组($\chi^2=14.474$, $P < 0.05$),见表1。

表1 两组疗效对比

Table 1 Comparison of efficacy between two groups

Groups	n	Cure	Improved	Failed	Effective rate
Observation group	186	138	42	6	96.8%*
Control group	164	112	28	24	85.4%

Note: compared with the control group, * $P < 0.05$.

2.2 炎症因子IL-1, IL-8对比

治疗前,两组IL-1和IL-8水平无统计学差异($P > 0.05$),治

疗后3个月,两组IL-1和IL-8水平均明显下降,且观察组IL-1和IL-8水平低于对照组($P < 0.05$),见表2。

表2 两组IL-1, IL-8对比($\bar{x} \pm s$)

Table 2 Comparison of IL-1, IL-8 between two groups ($\bar{x} \pm s$)

Groups	Time	IL-1 (ng/L)	IL-8 (ng/L)
Observation group n=186	Before treatment	11.15 ± 1.69	14.16 ± 2.87
	After treatment	$5.41 \pm 1.13^{*#}$	$5.26 \pm 1.72^{*#}$
Control group n=164	Before treatment	11.39 ± 1.16	13.83 ± 2.94
	After treatment	$8.22 \pm 1.45^*$	$8.96 \pm 1.91^*$

Note: compared with the value before treatment, * $P < 0.05$; compared with the control group, # $P < 0.05$.

2.3 生活质量比较

治疗前,两组SF-36各项评分无统计学差异($P > 0.05$),治疗后3个月,两组SF-36评分均明显增加($P < 0.05$)。观察组在躯体疼痛和总体健康2项评分明显高于对照组($P < 0.05$),其余6项评分相比无统计学差异($P > 0.05$),见表3。

3 讨论

慢性鼻窦炎、鼻息肉是耳鼻喉科常见的一种疾病,发病机制复杂,主要病理学机制是炎症反应过程^[7-9]。药物治疗慢性鼻窦炎及鼻息肉虽然能在一定程度上抑制病情发展,但远期疗效不佳,病情复发率较高^[10]。功能性鼻内窥镜手术是治疗慢性鼻窦炎、鼻息肉的常用手术方法,辅以综合治疗,不但能降低复发率,还能促进患者早日康复,改善鼻腔通气状态^[11,12]。

传统鼻窦手术对筛窦区和中鼻黏膜损伤较大,手术操作不

表 3 两组生活质量对比
Table 3 Comparison of life quality between two groups

Groups		Physiological function		Physiological ability		Body pain		General health		Social function		Vitality		Emotional function		Mental health	
Observation group n=186	Before treatment	25.12±	3.21	30.24±	5.82	31.45±	6.22	23.78±	8.35	29.61±	9.67	42.46±	13.62	29.74±	8.81	34.35±	13.64
	3 months after treatment	70.38±		74.62±		86.12±		76.52±		79.42±		81.27±		76.59±		71.66±	
		6.46*		8.48*		9.54* [#]		8.87* [#]		9.46*		16.29*		10.26*		13.39*	
Control group n=164	Before treatment	26.52±	2.95	31.22±	5.54	31.68±	6.74	23.11±	8.54	29.28±	8.66	43.51±	14.16	30.52±	9.17	33.37±	11.52
	3 months after treatment	69.18±		73.38±		65.34±		54.31±		65.76±		80.51±		77.13±		72.77±	
		7.17*		8.82*		9.24*		8.23*		7.68*		15.64*		10.57*		12.43*	

Note: compared with the value before treatment, *P<0.05; compared with the control group, [#]P<0.05.

够精细,对病灶部位切除不彻底,直接影响手术效果^[13,14]。与传统鼻窦手术相比,现代鼻内窥镜手术具有如下优势:① 手术视野范围广,能直视全部筛房;② 手术对鼻腔和鼻窦生理解剖结构影响小,能保留其生理功能;③ 对鼻窦病灶清理较为彻底;④ 视角开阔,利于进行鼻息肉切除操作,降低复发率^[15-17]。

宋巍等^[18]采用功能性鼻内窥镜手术治疗慢性鼻窦炎和鼻息肉,治疗后有效率明显高于传统鼻窦手术。本研究中,观察组患者治疗后有效率明显高于对照组患者,与宋巍等报道结果相仿,提示功能性鼻内窥镜手术能有效去除鼻息肉,恢复鼻腔、鼻窦通气引流功能,对鼻黏膜损伤小。单纯手术对鼻窦炎和鼻息肉虽然治疗效果好,但术后的综合性治疗也是有效降低复发率的关键措施。术后定期术腔清理、局部给药、全身用药及术腔冲洗是综合性治疗的主要内容^[19]。

治疗前,两组 IL-1 和 IL-8 水平无统计学差异(P>0.05),治疗后,两组 IL-1 和 IL-8 水平均明显下降且观察组 IL-1 和 IL-8 水平低于对照组(P<0.05)。IL-1, IL-8 均由单核-巨噬细胞产生,几乎所有的有核细胞均可产生 IL-1, IL-1 能吸引中性粒细胞,引起炎症介质释放,IL-8 对中性粒细胞具有趋化作用,从而实现炎症反应的调节^[20]。IL-1, IL-8 水平与鼻窦炎和鼻息肉发病程度有关,当组织有炎症时,IL-1, IL-8 水平处于高水平状态^[21]。经手术治疗后,鼻腔内局部炎症减轻,故 IL-1 和 IL-8 水平下降。综合性疗法联合功能性鼻内窥镜手术可以更好地切除鼻息肉,减轻局部炎症,故观察组患者体内 IL-1 和 IL-8 水平表达更低。

迪丽达尔等^[22]采用加强药物治疗与功能性内窥镜鼻窦手术治疗慢性鼻窦炎,并在围手术期给予综合治疗,结果加强药物治疗与功能性内窥镜鼻窦手术在缓解和改善精神和躯体症状方面优于加强药物治疗。本研究中,采用 SF-36 量表评价治疗后患者的生活质量改善情况,结果发现,治疗后 3 个月,两组 SF-36 评分均明显增加(P<0.05)。观察组在躯体疼痛和总体健康 2 项评分明显高于对照组(P<0.05),与迪丽达尔等研究相仿。说明经功能性鼻内窥镜手术治疗后患者生活质量有了显著改善。综上所述,功能性鼻内窥镜手术对鼻窦炎与鼻息肉具有较好的疗效,能显著减轻炎症反应,改善患者生活质量,值得临床推广使用。

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