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耳穴埋豆联合针刺对脑梗死患者睡眠质量及吞咽功能的影响*

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摘要 目的:探讨耳穴埋豆联合针刺对脑梗死患者睡眠质量及吞咽功能的影响。**方法:**选取 2016 年 3 月 2 日至 2021 年 3 月 2 日于我院进行脑梗死治疗的 80 例患者,将其随机分为观察组($n=40$)和对照组($n=40$),观察组采用耳穴埋豆联合针刺治疗干预,对照组采用常规治疗,对比两组患者匹兹堡睡眠质量指数问卷(Pittsburgh sleep quality index, PSQI)评分和睡眠状况自评量表(Self-Rating Scale of Sleep, SRSS)评分、渗透-误吸量表(Penetration-aspiration scale, PAS)评分、吞咽功能治疗有效率、治疗满意度。**结果:**治疗干预后,观察组患者的 PSQI 评分及 SRSS 评分明显优于对照组,差异有统计学意义($P<0.05$);治疗前,比较两组患者 3 种食团 PAS 评分,差异均无统计学意义($P>0.05$)。治疗后,比较两组患者 3 种食团 PAS 评分,均较治疗前明显下降,差异有统计学意义($P<0.05$)。观察组 5 mL 水、10 mL 水 PAS 评分明显低于对照组($P<0.05$),而比较两组患者 5 mL 布丁样食物 PSA 评分,差异无统计学意义($P>0.05$);观察组患者吞咽障碍经治疗后总有效率为 90%;对照组患者吞咽障碍经治疗后总有效率为 70%。差异有统计学意义($P<0.05$);观察组满意度明显高于对照组($P<0.05$)。**结论:**耳穴埋豆联合针刺治疗方法应用于脑梗死患者,可有效改善睡眠质量,提升患者吞咽功能,提高吞咽障碍治疗率,患者满意度提高,可应用于临床。

关键词:耳穴埋豆;针刺;脑梗死;睡眠质量;吞咽功能

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Effect of Auricular Point Embedding Beans Combined with Acupuncture on Sleep Quality and Swallowing Function of Patients with Cerebral Infarction*

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ABSTRACT Objective: To investigate the effect of ear acupoint embedding beans combined with acupuncture on sleep quality and swallowing function in patients with cerebral infarction. **Methods:** 80 patients with cerebral infarction treated in our hospital from March 2, 2016 to March 2, 2021 were selected and randomly divided into the observation group ($n=40$) and the control group ($n=40$). The observation group was treated with ear acupoint embedding beans combined with acupuncture, and the control group was treated with conventional treatment, PSQI score, self rating scale of sleep (SRSS) score, penetration aspiration scale (PAS) score, swallowing function treatment efficiency, treatment satisfaction. **Results:** After the intervention, the PSQI score and SRSS score of the observation group were significantly better than those of the control group ($P<0.05$); Before treatment, there was no significant difference in PAS scores of three kinds of food balls between the two groups ($P>0.05$). After treatment, the PAS scores of three kinds of food balls in the two groups were significantly lower than those before treatment ($P<0.05$). The PAS score of 5ml water and 10ml water in the observation group was significantly lower than that in the control group ($P<0.05$), but there was no significant difference in the PSA score of 5ml pudding like food between the two groups ($P>0.05$); The total effective rate of dysphagia in the observation group was 90%; The total effective rate of the control group was 70%. The difference was statistically significant ($P<0.05$); The satisfaction of the observation group was significantly higher than that of the control group ($P<0.05$). **Conclusion:** Auricular Point Embedding beans combined with acupuncture can effectively improve the sleep quality, swallowing function, treatment rate of dysphagia and patient satisfaction in patients with cerebral infarction, which can be applied in clinic.

Key words: Beans buried in ear acupoints; Acupuncture; Cerebral infarction; Sleep quality; Swallowing function

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前言

脑梗死又名缺血性卒中,中医称其为中风或卒中。因脑组织缺血缺氧性病变坏死,导致部分神经功能缺失^[1,2]。依据发病

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机制将脑梗死分为腔隙性脑梗死、脑栓塞、脑血栓形成等类型^[3]。脑血栓形成约占脑梗死总数的 60%，是最为常见的类型^[4]。脑梗死前兆症状为头昏、无力以及一时性肢体麻木等表现，因前兆症状程度较轻且持续时间短，常被患者忽略^[5,6]。脑梗死常合并糖尿病、高血压、动脉硬化、高脂血症等因素，或出现全身性非特异性症状^[7]。脑梗死发病急，常于睡眠中或休息时发病，于发病数小时后达到症状高峰表现，严重影响预后效果^[8]。一旦并发误吸，易造成吸入性肺炎，直接威胁患者的生命安全^[9]。脑梗死患者脑细胞损伤，不同的损伤部位对睡眠造成不同程度的影响，继而引发睡眠障碍^[10]。我国传统医学采用耳穴埋豆治疗睡眠障碍，耳穴埋豆具有安神之功效，具有调节大脑皮层的作用，可协调神经的抑制性和兴奋性，改善患者的睡眠质量^[11]。针刺是中医特色疗法之一，可产生持续刺激治疗疾病，其在脑梗死后遗症中的治疗效果已得到临床证实^[12]。本文旨在探究耳穴埋豆联合针刺对改善脑梗死患者睡眠质量和吞咽功能的影响，帮助患者提高生活质量。

1 资料与方法

1.1 一般资料

选取 2016 年 3 月 2 日至 2021 年 3 月 2 日于我院进行脑梗死治疗的 80 例患者作为研究对象，将患者随机分为观察组 (n=40) 和对照组 (n=40)。对照组：共 40 例，男性 25 例，女性 15 例；年龄 41~69 岁，平均年龄 (54.51±3.36) 岁。观察组：共 40 例，男性 25 例，女性 15 例，年龄 40~70 岁，平均年龄 (53.21±3.16) 岁。两组患者一般资料对比无明显差异 ($P<0.05$)，可以进行统计分析。

纳入标准：(1)符合脑梗死诊断标准^[13]，经头部 CT 或核磁共振检查确认梗死部位，经筛查患者确实存在吞咽障碍；(2)患者意识清楚，各项生命体征平稳；(3)病程 <3 个月。

排除标准：(1)合并精神症状、认知功能障碍、失语等；(2)出血倾向者；(3)伴有颈部肿瘤、甲状腺疾病等可能影响吞咽功能者。

1.2 方法

对照组给予常规治疗。帮助患者调整饮食，控制血糖、血压，由 9 名专业言语治疗师指导吞咽功能训练，沟通交流改善

患者的不良情绪。

观察组在对照组采用常规治疗基础上采用耳穴埋豆联合针刺治疗干预。

(1)耳穴埋豆治疗干预：用浓度为 75% 乙醇对患者整个耳廓消毒 2 次，耳廓干燥后，在心、神门、胆、交感、皮质下、肾、肝、胃等穴位将王不留行籽胶布贴上，之后对各个穴位按压。按压时间 1-2 min，按压次数为每天 3-5 次，边按压边与患者交流，询问患者按压时的真实感受，患者感觉酸、麻、胀、痛即为最佳按压状态，两耳交替贴用，每耳按压 3-5 天。如果脱落，及时通知护士补贴。

(2)针刺治疗干预：采用平补平泻法实施针刺，主穴取风池 (双)、翳明 (双)、供血 (双)、治呛穴 (舌骨与甲状软骨上切迹之间)、吞咽穴 (舌骨与甲状软骨上切迹之间，正中线上旁开 0.5 寸凹陷中)，配穴取外玉液、外金津、廉泉。患者保持坐或半坐位，皮肤消毒，取供血穴、双侧风池皮肤、翳明，以 0.30 mm×40 mm 毫针稍向内下方刺入 1.0~1.5 寸，之后留针 30 min，期间行针 3 次；取颈外玉液、部廉泉、外金津，采用同样的毫针，向舌根方向刺入 1.2~1.5 寸；取吞咽穴、治呛用 0.25 mm×25 mm 毫针直刺 0.3 寸。上述操作均需快速捻转行针 15 s 后出针，不留针。每次 30 min，每日一次，每周 6 次。1 疗程为 2 周。

1.3 观察指标与判定标准

(1)记录两组患者睡眠质量情况。使用 PSQI 问卷^[14]和 SRSS 量表^[15,16]进行患者治疗前后的评分记录。PSQI 包括入睡时间、睡眠质量、睡眠时间、睡眠障碍、睡眠效率、催眠药物及日间功能障碍 7 个评价项目。治愈：PSQI 评分改善率大于 80%，睡眠质量颇佳；显效：PSQI 评分改善率 50%~80%，睡眠障碍症状明显缓解；有效：PSQI 评分改善率 20%~50%，睡眠障碍症状略有缓解；无效：PSQI 评分改善率小于 20%，睡眠障碍症状没有具体改变。SRSS 量表共 10 个问题，总分为 10~50 分，评分越低，睡眠的问题越少。

(2)测定两组患者吞咽功能情况。使用 PAS^[17,18]评分进行评定。两组患者均于治疗前后的 3 天检查，由同一名康复师完成测试和评定。取布丁样黏度食物 5 mL、水 5 mL、水 10 mL 进行测试。量表分为 8 级，如表 1。

表 1 渗透 - 误吸量表

Table 1 Infiltration aspiration scale

Degree	VFSS
Level 1	Food does not enter the airway
Level 2	Food enters the airway, remains above the vocal cords, and is cleared out of the airway
Level 3	Food enters the airway, remains above the vocal cords, and is cleared out of the airway
Level 4	Food enters the airway, attaches to the vocal cords, and is cleared out of the airway
Level 5	Food enters the airway, attaches to the vocal cords, and is not cleared out of the airway
Level 6	Food enters the airway and below the vocal cord, but can be cleared out of the airway or into the throat
Level 7	When food enters the airway and below the vocal cord, it cannot be cleared out of the trachea with force
Level 8	Food entered the airway and below the vocal cord without forced clearance

(3)两组患者吞咽功能治疗有效率比较。经洼田饮水试验 比较吞咽功能治疗有效率，患者端坐，饮 30 mL 温开水，记录呛

咳情况和所需时间。评定标准分为 5 级,如表 2。显效:吞咽障碍饮水试验 3 级;无效:吞咽障碍未改善,洼田饮水试验 4~5 级。碍改善明显,洼田饮水试验达 1~2 级;有效:吞咽障碍改善,洼

表 2 洼田饮水试验评定表

Table 2 Evaluation table of drinking water test in depression field

Degree	Judging standard
Level 1	Can drink at one time, no cough, pause, time in 5 s
Level 2	After drinking twice, there was no cough or pause, and the time was 5 ~ 10 s
Level 3	Can drink at one time, but have a cough, the time is 5 ~ 10 s
Level 4	Drink twice, but cough, time is 5 ~ 10 s
Level 5	Can not drink all, repeatedly choking cough, time in more than 10 s

(4)比较两组患者治疗满意度。采用本院自制治疗满意度调查问卷评价,满分 100 分。>90 分为非常满意,60 分~89 分为满意,<60 分为不满意。满意率 = 非常满意率 + 满意率。

1.4 统计学处理

采取统计学软件 SPSS 20.0 对文中数据进行分析,计数指标用例数 / 百分比(n%)表示,进行 χ^2 检验;计量指标用均值 $\pm$ 标准差($\bar{x}\pm s$)表示,采用 t 检验;以 $P<0.05$ 为差异有统计

学意义。

2 结果

2.1 治疗前后 PSQI 评分及 SRSS 评分变化比较

治疗干预后,观察组患者的 PSQI 评分及 SRSS 评分均显著优于对照组($P<0.05$)。见表 3。

表 3 治疗前后 PSQI 评分及 SRSS 评分变化比较($\bar{x}\pm s$)Table 3 Comparison of PSQI and SRSS scores before and after treatment($\bar{x}\pm s$)

Groups	Cases	PSQI Score				SRSS Score			
		Before treatment	After treatment	t	P	Before treatment	After treatment	t	P
Control group	40	13.1 $\pm$ 3.2	11.5 $\pm$ 4.0	1.975	0.052	29.7 $\pm$ 5.0	27.1 $\pm$ 5.2	1.789	0.078
Observation group	40	13.4 $\pm$ 3.2	6.1 $\pm$ 1.4	13.218	0.000	29.1 $\pm$ 4.8	23.8 $\pm$ 4.6	6.708	0.000
t	-	0.419	8.059	-	-	0.000	20.742	-	-
P	-	0.676	0.000	-	-	1.000	0.000	-	-

2.2 比较两组患者 PAS 评分

治疗前两组患者 3 种 PAS 评分差异均无统计学意义($P>0.05$)。治疗后,两组患者 3 种食团 PAS 评分均较治疗前显著下

降($P<0.05$)。观察组 5 mL 水、10 mL 水 PAS 评分明显低于对照组($P<0.05$),而两组患者 5 mL 布丁样食物 PSA 评分差异无统计学意义($P>0.05$)。如表 4 所示。

表 4 两组患者 PAS 评分对比($\bar{x}\pm s$, 分)Table 4 Comparison of PAS scores between the two groups ($\bar{x}\pm s$, Score)

Groups	Cases	5 mL Pudding like food				5 mL water			
		Before treatment	After treatment	t	P	Before treatment	After treatment	t	P
Control group	40	4.07 $\pm$ 1.25	2.04 $\pm$ 0.83	8.557	0.000	5.17 $\pm$ 1.05	3.14 $\pm$ 1.15	8.245	0.000
Observation group	40	3.63 $\pm$ 1.20	1.91 $\pm$ 0.96	7.070	0.000	4.93 $\pm$ 1.02	2.26 $\pm$ 1.31	10.171	0.000
t	-	1.606	0.793	-	-	1.037	3.193	-	-
P	-	0.112	0.462	-	-	0.303	0.002	-	-

续表 4

Continued Table 4

Groups	Cases	10 mL water			
		Before treatment	After treatment	t	P
Control group	40	6.02 $\pm$ 1.10	4.14 $\pm$ 1.22	7.238	0.000
Observation group	40	5.76 $\pm$ 1.17	3.01 $\pm$ 1.54	8.993	0.000
t	-	1.024	3.638	-	-
P	-	0.309	0.000	-	-

2.3 吞咽功能治疗有效率

观察组患者吞咽障碍经治疗后总有效率显著高于对照组 ($P<0.05$)。如表 5 所示。

2.4 治疗满意度对比

观察组满意度显著高于对照组 ($P<0.05$)。如表 6 所示。

表 5 对比两组患者吞咽功能治疗有效率(n,%)

Table 5 The effective rate of swallowing function in the two groups was compared (n,%)

Groups	Cases	Significantly effective	Effective	Invalid	Efficient Rate
Control group	40	18	10	12	28(70.00%)
Observation group	40	24	12	4	36(90.00%)
χ^2	-	-	-	-	5.00
P	-	-	-	-	0.025

表 6 治疗满意度对比(n,%)

Table 6 Comparison of treatment satisfaction(n,%)

Groups	Cases	Very satisfied	Quite satisfied	Dissatisfied	Total satisfaction
Control group	40	21(52.50%)	16(40.00%)	3(7.50%)	37(92.50%)
Observation group	40	16(40.00%)	14(35.00%)	10(25.00%)	30(75.00%)
χ^2	-	-	-	-	4.50
P	-	-	-	-	0.0339

3 讨论

随着我国国民经济的快速发展,人们的生活质量与生活方式较以往有了显著的变化,随之而来的还有人口老龄化以及疾病发病率的大幅增长。当前脑血管病已成为危害中老年人身体健康和生命的主要疾病。脑血管病是常见神经科疾病之一,其病因受到很多因素的影响,比较复杂,常规分类法将脑血管病分为血液成分改变、血管壁病变、血流动力学改变^[19]。临床上,许多具备脑血管病危险因素的人并未患有脑血管病,相反,很多人不具备脑血管病危险因素,但是却患上脑血管病,可见,脑血管病发病因素或许受到不良生活习惯、不良嗜好遗传等因素影响^[20]。脑梗死是神经内科常见的脑血管疾病,是由于脑部出现血供障碍,产生缺血、缺氧进而造成的局部脑组织软化或者坏死。脑梗死会造成患者出现很多神经功能缺失症状,如瘫痪、四肢触感、麻痹、头痛、平衡感紊乱等,甚至死亡^[21,22]。

脑梗死患者因多种神经功能缺失,易产生躯体和心理的不适,进而导致影响其睡眠质量,严重时该疾病患者因心理问题产生抑郁症。据报道,耳穴埋豆治疗方法对于改善睡眠质量具有良好的效果^[23]。脑梗死后患者常发生吞咽反射延迟、吞咽协调性差、软腭麻痹以及喉口遮盖不严等吞咽障碍,多见于舌下神经、舌咽、迷走神经等受损引起的延髓麻痹,以及由双侧皮质延髓束受到损害而造成的假性延髓麻痹^[24]。误吸是引发脑梗死患者发生吸入性肺炎的重要因素,误吸通常指口咽部的食物因无法及时吐出或者咽下,吸入肺部或气管内^[25]。目前,针对脑梗死患者吞咽障碍该如何有效治疗,是医护人员以及患者家属迫切解决的问题,电视荧光吞咽功能检查(videofluoroscopic swallowing study, VFSS) 是评估吞咽功能的金标准^[26],PAS 建立在 VFSS 基础上,PAS 量化误吸的程度更加客观、可靠。脑梗死后治疗吞咽障碍的方法较多,其中针刺疗法可有效改善患者吞咽障碍。耳穴埋豆外治疗法是在耳部特定穴位粘贴完整的王不留

行,给予患者适当的揉、捏、按、压,使其产生麻、热、酸、胀的感觉,实现治疗睡眠障碍^[27]。

经比较治疗前后 PSQI 评分及 SRSS 评分,结果表明治疗干预后,观察组患者的 PSQI 评分及 SRSS 评分明显优于对照组,发现与 Song Y 等^[28]研究结果类似,分析其原因可能在于:耳穴埋豆具有养心安神、疏通经络、活血之功效,对患者睡眠障碍情况可明显改善,神门、皮质下为治疗失眠的主穴,可协调阴阳、交通心肾、调整脏腑的功能、健脾安神,治疗失眠障碍中其关键作用。为了探究其对吞咽功能的影响,本文进一步比较两组患者的 PSA 评分:治疗前,两组患者 3 种食团 PAS 评分差异无统计学意义 ($P>0.05$);治疗后,两组患者 3 种食团 PAS 评分,均较治疗前明显下降 ($P<0.05$);观察组 5 mL 水、10 mL 水 PAS 评分明显低于对照组,而比较两组患者 5 mL 布丁样食物 PSA 评分差异无统计学意义 ($P>0.05$)。由此证明针刺对脑梗死患者的吞咽功能的改善具有重要作用,提示针刺疗法改善液态食物的误吸更有效。另外,本研两组患者治疗效果比较结果表明:观察组患者吞咽障碍经治疗后总有效率为 90%;对照组患者吞咽障碍经治疗后总有效率为 70%,观察组患者吞咽障碍经治疗后总有效率显著高于对照组 ($P<0.05$),与 Lee JT 等^[29]相关研究结果相符,分析其治疗有效率高原因在于:针刺可以刺激局部相关神经,重组皮质神经元,重建神经反射弧,促使麻痹的神经功能恢复正常,进而帮助患者恢复吞咽功能^[30]。此外,统计满意度发现,观察组满意度明显高于对照组 ($P<0.05$),说明耳穴埋豆联合针刺治疗脑梗死患者,对于改善睡眠质量及吞咽功能具有显著效果,能够显著提高患者满意度。

综上所述,耳穴埋豆联合针刺治疗方法应用于脑梗死患者,可有效改善睡眠质量,提升患者吞咽功能,提高吞咽障碍治疗有效率,患者满意度较高,可广泛应用于临床。

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