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浮针埋线联合推拿疗法对神经根型颈椎病疗效 及对颈椎活动度、生理曲度变化的影响*

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摘要 目的:探讨与分析浮针埋线联合推拿疗法对神经根型颈椎病疗效及对颈椎活动度、生理曲度变化的影响。**方法:**2019年2月到2021年6月选择在本院诊治的神经根型颈椎病患者105例作为研究对象,根据1:1简单分配原则把患者分为浮针组53例与对照组52例。对照组给予推拿治疗,浮针组在对照组治疗的基础上给予浮针埋线治疗,两组都治疗观察21 d,记录患者颈椎活动度、生理曲度变化情况。**结果:**治疗后浮针组的总有效率为98.1%,与对照组的86.5%相比有明显提高($P<0.05$)。浮针组与对照组治疗后的颈椎活动度评分明显低于治疗前,浮针组与对照组相比也明显降低($P<0.05$)。浮针组与对照组治疗后的疼痛视觉模拟评分法(VAS)评分明显低于治疗前,颈椎日本骨科协会评估治疗分数(JOA)评分明显高于治疗前,治疗后浮针组与对照组对比也有明显差异($P<0.05$)。浮针组与对照组治疗后的颈椎生理曲度明显高于治疗前,浮针组也明显高于对照组($P<0.05$)。**结论:**浮针埋线联合推拿疗法在神经根型颈椎病患者中的应用能促进缓解疼痛,改善颈椎功能,能提高治疗疗效,改善患者的颈椎活动度,还可促进颈椎生理曲度恢复正常。

关键词:浮针埋线;推拿;神经根型颈椎病;颈椎活动度;生理曲度

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Therapeutic Effect of Floating Acupuncture and Catgut Embedding Combined with Massage Therapy on Cervical Spondylosis of Nerve Root Type and Its Influence on Changes in Cervical Mobility and Physiological Curvature*

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ABSTRACT Objective: To explore and analysis the therapeutic effect of floating acupuncture and catgut embedding combined with massage therapy on cervical spondylosis of nerve root type and its influence on the range of motion and physiological curvature of the cervical spine. **Methods:** From February 2019 to June 2021, 105 cases of patients with cervical radiculopathy diagnosed and treated in our hospital were selected as the research subjects. Accorded to the simple allocation principle of 1:1, the patients were divided into the floating needle group with 53 cases and the matched group with 52 cases. The matched group were given tuina therapy, and on the basis of the treatment of the control group, the floating acupuncture group was given floating acupuncture and catgut embedding therapy. Both groups were treated for 21 days, and the changes of cervical spine activity and physiological curvature were recorded. **Results:** After treatment, the total effective rates of the floating acupuncture group were 98.1%, which were significantly higher than that of the matched group (86.5%) ($P<0.05$). The cervical spine mobility score after treatment in the floating acupuncture group and the matched group were significantly lower than that before treatment, and the floating acupuncture group were also significantly lower than that in the matched group ($P<0.05$). The Visual Analogue (VAS) scores of the floating needle group and the matched group after treatment were significantly lower than those before treatment, and the Japanese Orthopaedic Association (JOA) scores of cervical spine were significantly lower It were higher than that before treatment, and there were also difference compared between the floating acupuncture group and the matched group after treatment ($P<0.05$). The physiological curvature of the cervical spine after treatment in the floating acupuncture group and the matched group were significantly higher than that before treatment, and the floating acupuncture group were also significantly higher than the matched group ($P<0.05$). **Conclusion:** The application of floating acupuncture and catgut embedding combined with massage therapy in patients with cervical radiculopathy can promote pain relief, improve cervical spine function, improve the therapeutic effect, improve the patient's cervical spine mobility, and promote the return of cervical physiological curvature to normal.

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前言

颈椎病为临床上比较常见的疾病之一,由于在现今生活环境的影响下,加之很多人群低头伏案工作,使得其发病率逐年上升,严重地影响人们的工作和生活,也对患者的生活质量有负面影响^[1,2]。神经根型颈椎病是颈椎病中的主要类型,在于在于颈部肌肉力量不平衡、周围韧带和关节囊组织变性、神经功能障碍,造成颈椎动静平衡系统失调,使颈椎椎体向不同方向移位,进而引起颈椎生理曲度的变化^[3]。手术为神经根型颈椎病的主要根治方法,但是很多患者由于各种因素的影响,多希望进行非手术治疗而缓解症状^[4,5]。中医学认为神经根型颈椎病发病原因内有正气虚弱,肝肾亏虚,或先天不足,致气血不荣、气血阻滞,导致筋脉拘急,滞而不通,伴随有颈部经脉失荣与不通^[6]。推拿为中医治疗的主要方法之一,可通过缓解椎旁肌肉的紧张和痉挛,进而减轻颈椎的应力,减轻颈部神经根的压迫和刺激状况^[7]。浮针埋线为取穴少而精、通与补兼施的治疗措施,使气机调达,气血得以输布,既能疏通太阳经脉之气血,还可温补全身之阳气,将背俞各穴上行至本穴的阳热之气上行头颈部,脑府诸窍得以濡养,使气机调达,达到疏通头颈部经气,从而达到治疗效果^[8,9]。颈椎生理曲度异常指颈椎生理前凸、旋转、后凸和移位,是神经根型颈椎病的重要指征之一^[10]。本文具体探讨与分析了浮针埋线联合推拿疗法对神经根型颈椎病疗效及对颈椎活动度、生理曲度变化的影响,以促进两者的联合使用。现报道如下。

1 资料与方法

1.1 研究对象

2019年2月到2021年6月选择在本院诊治的神经根型颈椎病患者105例作为研究对象。

纳入标准:符合腰神经根型颈椎病的诊断标准,中医诊断为劳伤血瘀型(颈强背痛,肩臂酸困,手指麻木,劳则加重,舌红少苔,脉细弱);患者在自愿条件下签署了知情同意书;医院的医学伦理委员会批准了此次研究;未经手术治疗的患者;积极配合者。

排除标准:合并有传染性疾病者;精神病患者;颈椎肿瘤、颈椎结核、椎管内肿瘤等所致腰腿痛患者;临床资料缺乏者;不既往有外伤、手术史,或进行过手术治疗史者;合并有严重心、肝、脑、肾疾病者;凝血功能障碍者;发热患者或有呼吸道感染性疾病者;精神病患者、文化程度有限、交流障碍者;备孕、妊娠、哺乳期妇女;合并有颈椎皮肤疾病的患者。

根据1:1简单分配原则把患者分为浮针组53例与对照组52例,浮针组中男27例,女26例;年龄最小32岁,最大69岁,平均年龄 42.19 ± 3.14 岁;平均病程 4.12 ± 0.23 年;平均体重指数 23.10 ± 1.11 kg/m²;平均心率 87.14 ± 2.58 次/min;平均收缩压 125.02 ± 7.39 mmHg;平均舒张压 75.58 ± 10.57 mmHg。对照组中男25例,女27例;年龄最小31岁,最大70岁,平均年龄

42.87 ± 2.11 岁;平均病程 4.14 ± 0.33 年;平均体重指数 23.33 ± 1.38 kg/m²;平均心率 87.22 ± 3.48 次/min;平均收缩压 125.11 ± 7.39 mmHg;平均舒张压 75.32 ± 8.48 mmHg。浮针组与对照组患者数据对比无差异($P > 0.05$)。

1.2 治疗方法

对照组:给予推拿治疗,患者取坐位,治疗方法如下:(1)拇指点按颈部棘突旁压痛点;叩击法作用于上肢、肩部、背部。(2)拿揉、点按颈、肩、上背,手指点按肩贞、肩髃、风池、曲池、合谷等穴位。(3)一指禅推法、弹拨法反复作用于患者颈部,法施治患者肩部、上背、颈部,每次总治疗时间持续30 min左右,1次/d,持续治疗21 d。

浮针组:在对照组治疗的基础上给予浮针埋线治疗,取患者的椎五针、项五针、星状神经节等穴位。无菌操作,左手贴患者颈部,拇指轻触皮肤,右手向下移动,感觉到阻力后快速刺手刺入皮肤,然后进行埋线,取穴同浮针,消毒后将备好的2 cm羊肠线穿入埋线针,线体仅穿入埋线针体的1.5 cm深处左右。右手持针,左手食指固定穴位迅速破皮,皮下缓慢进入,到达横突骨面时,提到回旋肌层面推线,结束后迅速将埋线针退出,快速按压针孔至不出血,再用创可贴贴敷针孔。治疗观察21 d。

1.3 观察指标

(1)在治疗后进行总体疗效标准,治愈:原有症状及体征消失,肌力及颈椎功能恢复正常;显效:原有症状消失,颈椎功能明显改善;无效:原有症状和体征同治疗前,颈椎功能无改善甚或恶化。(治愈+显效)/组内例数 $\times 100.0\%$ =总有效率。

(2)在治疗前后进行颈椎活动度评分,4分:基本不能颈椎活动;3分:极大地影响日常生活,颈椎活动明显受限;2分:较小影响日常生活,颈椎活动稍有受限;1分:颈椎活动不受限,完全没有影响日常生活。

(3)在治疗前与治疗后采用视觉模拟评分法(Visual Analogue Score, VAS)评估患者的疼痛状况,分为0-10分评分,分数与疼痛程度呈现正相关性。同时采用日本骨科协会评估治疗分数(Japanese Orthopaedic Association Scores, JOA)评估患者的颈椎功能,最高为29分,分数与颈椎功能呈现正相关性。

(4)在治疗前后测定与记录所有患者的颈椎生理曲度,采用Borden氏测量法测量颈椎生理曲线的深度,测定3次取平均值。

1.4 统计方法

选择SPSS22.00软件对本研究的所有计量数据与计数数据进行分析,以 $P < 0.05$ 为差异有统计学意义。通过均数 $\pm$ 标准差来表达计量数据资料,t检验来对符合正态分布的数据进行统计分析,秩和检验来对不符合正态分布的数据进行分析;百分率的方式来表示计量资料,卡方检验来进行对比,检验水准为 $\alpha = 0.05$ 。

2 结果

2.1 总有效率对比

治疗后浮针组的总有效率为 98.1 %,与对照组的 86.5 %相比有明显提高($P<0.05$)。见表 1。

表 1 浮针组与对照组治疗后总有效率对比(n)

Table 1 Comparison of total response rate between floating needle group and matched group (n)

Groups	n	Recure	Excellence	Invalid	Total effective rate
Floating needle group	53	48	4	1	52(98.1%) ^b
Matched group	52	32	13	7	45(86.5%)

Note: compared with matched group, ^b $P<0.05$, the same below.

2.2 颈椎活动度评分变化对比

前,浮针组与对照组相比也明显降低($P<0.05$)。见表 2。

浮针组与对照组治疗后的颈椎活动度评分明显低于治疗

表 2 浮针组与对照组治疗前后颈椎活动度评分变化对比(分,均数±标准差)

Table 2 Comparison of cervical spine mobility score before and after treatment between floating needle group and control group (score, mean± standard deviation)

Groups	n	Pretherapy	Post-treatment
Floating needle group	53	3.04±0.32	1.10±0.11 ^{ab}
Matched group	52	3.08±0.18	1.76±0.36 ^a

Note: compared with pretherapy, ^a $P<0.05$.

2.3 疼痛 VAS 评分与颈椎 JOA 评分变化对比

前,颈椎 JOA 评分明显高于治疗前,治疗后浮针组与对照组对

浮针组与对照组治疗后的疼痛 VAS 评分明显低于治疗 比也有明显差异($P<0.05$)。见表 3。

表 3 浮针组与对照组治疗前后疼痛 VAS 评分与颈椎 JOA 评分变化对比(分,均数±标准差)

Table 3 Comparison of pain VAS score and cervical JOA score before and after treatment between floating needle group and control group (score, mean± standard deviation)

Groups	n	Pain VAS score		Cervical spine JOA score	
		Pretherapy	Post-treatment	Pretherapy	Post-treatment
Floating needle group	53	6.52±0.33	1.73±0.25 ^{ab}	14.58±1.22	26.40±1.58 ^{ab}
Matched group	52	6.48±0.22	3.10±0.14 ^a	14.56±1.58	22.65±1.66 ^a

2.4 颈椎生理曲度变化对比

浮针组也明显高于对照组($P<0.05$)。见表 4。

浮针组与对照组治疗后的颈椎生理曲度明显高于治疗前,

表 4 浮针组与对照组治疗前后颈椎生理曲度变化对比(mm,均数±标准差)

Table 4 Comparison of physiological curvature changes of cervical spine before and after treatment between floating needle group and control group (mm, mean± standard deviation)

Groups	n	Pretherapy	Post-treatment
Floating needle group	53	7.14±0.24	9.56±0.47 ^{ab}
Matched group	52	7.16±0.23	8.35±0.41 ^a

3 讨论

在人类亚健康状态中,颈椎病是头号疾病,明显降低人们的生活质量。特别是神经根型颈椎病具有病程长、病情反复、难以治疗等特点,可形成恶性循环^[1]。现代医学认为神经根型颈椎病为内外在各种因素的影响,导致颈部肌肉、软组织炎症性渗出,造成肌肉韧带机化粘连,使得局部组织肿胀与骨质增生。同时部分患者随着年龄增大,伴随颈部的韧带、肌肉等软组织功能失调,也存在骨质退行性病变,促使颈椎病的发生^[12]。同时

因智能手机的普及,使得大量人群的颈部肌群处于疲劳状态,导致颈椎病发病率持续上升,且发病年龄有所降低^[13]。

神经根型颈椎病属于中医学“痹证”的范畴,内因为肝肾气血亏虚、筋骨失养、督阳亏虚、不荣则痛,外因为外邪或跌扑损伤闭阻经络、不通则痛、气血运行失畅,以肝肾亏虚、督阳亏虚为本。中医推拿在治疗颈椎病领域具有重要地位,可有效降低肌张力,可改善颈椎软组织循环代谢^[14,15]。同时推拿可有效恢复颈椎小关节之间紊乱的位置关系,矫正颈椎椎间关节功能紊乱,通过机械作用解除压迫,消除症状,矫正椎体错位,重建颈

椎稳定性,矫正颈椎椎间关节功能紊乱^[16,17]。本研究显示治疗后浮针组的总有效率为 98.1%,与对照组的 86.5%相比有明显提高;浮针组与对照组治疗后的颈椎活动度评分明显低于治疗前,浮针组与对照组相比也明显降低,表明浮针埋线联合推拿疗法在神经根型颈椎病患者中的应用能提高治疗疗效,改善患者的颈椎活动度。分析可知,浮针埋线可改善局部血流动力,恢复颈椎生物力学动态平衡,缓解局部压力^[18]。浮针埋线还可使小血管扩张,改善或重建局部血液循环,也可将粘连的筋束、纤维组织彻底松解,剥离瘢痕组织,促进清楚炎性物质及有害代谢物,从而促进改善患者的预后^[19]。

由于各种因素的影响,神经根型颈椎病发病越来越趋于年轻化,临床表现肢体麻木疼痛、头痛、功能受限、肩颈酸痛、颈部僵硬等。中医为神经根型颈椎病属本虚标实之证,导致瘀血阻滞经络为标,风、寒、湿邪侵袭,治疗上应标本兼治^[20,21]。中医传统上对于神经根型颈椎病的治疗方法包括艾灸、针刺、推拿、功能训练等,推拿可松解肌肉、韧带及其他软组织的各种粘连、疤痕,改善局部血液循环,缓解肌肉痉挛,降低肌肉张力,加快代谢吸收和排除,从而消除炎症,解除病灶压迫,促进末梢神经血液、淋巴循环^[22,23]。本研究显示浮针组与对照组治疗后的疼痛 VAS 评分明显低于治疗前,颈椎 JOA 评分明显高于治疗前,治疗后浮针组与对照组对比也有明显差异,表明浮针埋线联合推拿疗法在神经根型颈椎病患者的应用能促进缓解疼痛,改善颈椎功能。分析可知,浮针埋线可使病变部位的毛细血管收缩,改善局部的血液循环,损伤创面修复,抑制或消除软组织的无菌性炎症,防止再粘连^[24]。浮针埋线同时具备针刺的作用,可以对相应的穴位进行刺激,埋线部位刺激可以深达骨面,并且持久,可以加快炎症的修复,可以刺激局部的新陈代谢,使得局部有害物质可尽快被清除,从而改善局部血液循环,促进了修复过程^[25,26]。

颈椎由颈部肌群、颈椎椎体等生理解剖部位构成,上述组织与器官相互紧密融合,从而促进维持人体生物应力系统稳定性^[27]。正常生理条件下颈椎为生理性前凸,生理曲度异常改变为颈椎病的发生关键环节,因此,使颈椎生理曲度恢复和维持正常成为当前临床研究的重点^[28]。本研究显示浮针组与对照组治疗后的颈椎生理曲度明显高于治疗前,浮针组也明显高于对照组。该结果与 Sun W 等人^[29]的报道具有一致性。分析可知,推拿治疗可通过机械作用解除压迫,归位序列不齐,矫正椎体错位、恢复颈椎正常生理曲度。浮针埋线治疗可促进肌肉僵硬、头痛头晕、颈椎背疼痛症状改善,能够激活自身免疫修复通路,消除局部炎症,恢复局部应力的平衡,解除粘连的肌肉,抑制椎动脉痉挛,调节周围区域的血流速度及血管扩张,减少对交感神经的压迫刺激,从而促进改善患者的颈椎生理曲度^[30]。本研究也有一定不足,研究样本数量不够,浮针埋线联合推拿疗法对于操作的要求比较高,具体作用机制分析不够深入,需要进一步分析。

总之,浮针埋线联合推拿疗法在神经根型颈椎病患者的应用能促进缓解疼痛,改善颈椎功能,能提高治疗疗效,改善患者的颈椎活动度,还可促进颈椎生理曲度恢复正常。

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