

卧位偏向牵引联合中药薰蒸 治疗神经根型颈椎病的临床研究

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摘要 目的:观察卧位偏向牵引联合中药薰蒸治疗神经根型颈椎病的临床疗效。方法:将 120 例神经根型颈椎病患者随机分为卧位偏向牵引组、卧位常规牵引组、坐位牵引组,每组 40 例。卧位牵引治疗包括前屈位牵引 8 d、中立位牵引 2 d、背伸位牵引 4 d;卧位偏向牵引组在前屈位牵引时采用卧位偏向牵引,中立位、背伸位牵引时采用常规卧位牵引;卧位常规牵引组全程采用常规卧位牵引法牵引;坐位牵引组采用传统坐位间歇牵引法。3 组患者均采用中药薰蒸治疗。牵引和中药薰蒸均每日 2 次,连续治疗 14 d。分别于治疗前和治疗结束后,采用视觉模拟量表(visual analogue scale, VAS)评价患者颈部疼痛情况,测量患者颈椎旋转、前屈活动度,采用田中靖久神经根型颈椎病症状量表 20 分法和颈椎功能障碍指数(neck disability index, NDI)评价临床疗效,采用剪切波弹性成像技术测量斜方肌的杨氏模量值。结果:①颈部疼痛 VAS 评分。治疗结束后,3 组患者颈部疼痛 VAS 评分均小于治疗前[(5.70±0.82)分, (1.43±0.68)分, $t=37.779$, $P=0.000$; (5.43±0.81)分, (2.53±0.93)分, $t=15.945$, $P=0.000$; (5.43±0.98)分, (3.00±1.13)分, $t=16.013$, $P=0.000$],卧位偏向牵引组患者颈部疼痛 VAS 评分小于卧位常规牵引组和坐位牵引组(LSD- $t=6.040$, $P=0.000$; LSD- $t=7.562$, $P=0.000$),卧位常规牵引组患者颈部疼痛 VAS 评分小于坐位牵引组(LSD- $t=2.051$, $P=0.044$)。②颈椎旋转活动度。治疗结束后,3 组患者颈椎旋转活动度均大于治疗前(46.60°±10.45°, 63.65°±7.79°, $t=-9.379$, $P=0.000$; 45.95°±9.24°, 57.58°±7.54°, $t=-6.694$, $P=0.000$; 48.22°±9.96°, 53.72°±9.39°, $t=-2.298$, $P=0.000$),卧位偏向牵引组患者颈椎旋转活动度大于卧位常规牵引组和坐位牵引组(LSD- $t=-3.280$, $P=0.001$; LSD- $t=-5.371$, $P=0.000$),卧位常规牵引组患者颈椎旋转活动度大于坐位牵引组(LSD- $t=-2.083$, $P=0.040$)。③颈椎前屈活动度。治疗结束后,3 组患者颈椎前屈活动度均大于治疗前(28.45°±3.18°, 41.57°±2.88°, $t=-18.310$, $P=0.000$; 27.70°±3.07°, 38.95°±3.38°, $t=-16.843$, $P=0.000$; 28.15°±3.30°, 35.25°±3.80°, $t=-9.692$, $P=0.000$),卧位偏向牵引组患者颈椎前屈活动度大于卧位常规牵引组和坐位牵引组(LSD- $t=-3.482$, $P=0.001$; LSD- $t=-8.374$, $P=0.000$),卧位常规牵引组患者颈椎前屈活动度大于坐位牵引组(LSD- $t=-4.901$, $P=0.000$)。④田中靖久神经根型颈椎病症状量表 20 分法评分。治疗结束后,3 组患者田中靖久神经根型颈椎病症状量表 20 分法评分均大于治疗前[(7.58±3.87)分, (16.10±2.04)分, $t=-14.437$, $P=0.000$; (7.38±3.31)分, (13.25±2.10)分, $t=-12.361$, $P=0.000$; (7.25±2.99)分, (12.65±2.70)分, $t=-10.696$, $P=0.000$],卧位偏向牵引组患者田中靖久神经根型颈椎病症状量表 20 分法评分大于卧位常规牵引组和坐位牵引组(LSD- $t=-6.172$, $P=0.001$; LSD- $t=-6.450$, $P=0.000$),卧位常规牵引组患者田中靖久神经根型颈椎病症状量表 20 分法评分与坐位牵引组比较,差异无统计学意义(LSD- $t=-1.113$, $P=0.271$)。⑤NDI。治疗结束后,3 组患者 NDI 均小于治疗前[(49.85±15.29)%, (18.93±12.05)%, $t=10.694$, $P=0.000$; (51.73±15.31)%, (29.95±9.08)%, $t=10.728$, $P=0.000$; (53.10±12.67)%, (33.85±10.33)%, $t=7.190$, $P=0.000$],卧位偏向牵引组患者 NDI 小于卧位常规牵引组和坐位牵引组(LSD- $t=4.622$, $P=0.001$; LSD- $t=5.951$, $P=0.000$),卧位常规牵引组患者 NDI 与坐位牵引组比较,差异无统计学意义(LSD- $t=1.790$, $P=0.077$)。⑥斜方肌杨氏模量值。治疗结束后,3 组患者斜方肌杨氏模量值均小于治疗前[(92.67±17.96)%, (62.80±13.35)%, $t=14.696$, $P=0.000$; (87.05±12.30)%, (77.03±13.10)%, $t=5.959$, $P=0.000$; (87.33±14.48)%, (82.58±15.81)%, $t=2.337$, $P=0.025$],卧位偏向牵引组患者斜方肌杨氏模量值小于卧位常规牵引组和坐位牵引组(LSD- $t=4.811$, $P=0.001$; LSD- $t=6.044$, $P=0.000$),卧位常规牵引组患者斜方肌杨氏模量值与坐位牵引组比较,差异无统计学意义(LSD- $t=1.711$, $P=0.091$)。结论:卧位偏向牵引联合中药薰蒸治疗神经根型颈椎病,能够缓解颈部疼痛、改善颈部功能和斜方肌僵硬,疗效优于常规卧位牵引和坐位牵引联合中药薰蒸。

关键词 颈椎病;神经根病;牵引术;熏洗疗法;临床试验

A clinical study of the treatment of cervical spondylotic radiculopathy by deflected supine traction combined with Chinese herbal steaming

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ABSTRACT Objective: To observe the clinical efficacy of deflected supine traction combined with Chinese herbal steaming in the treatment of cervical spondylotic radiculopathy (CSR). **Methods:** A total of 120 CSR patients were randomly divided into a deflected supine traction (DST) group, a conventional supine traction (CST) group, and a sitting traction (ST) group, with 40 cases in each group. The supine traction consisted of traction in the forward flexion position for 8 days, in the neutral position for 2 days, and in the back flexion position for 4 days. In the DST group, DST was adopted in the traction in the forward flexion position, and CST was adopted in the traction in the neutral position and back flexion position. In the CST group, CST was employed throughout the whole treatment cycle. In the ST group, conventional intermittent ST was employed. All patients were treated with Chinese herbal steaming. Traction and Chinese herbal steaming were performed twice a day for 14 days. Before and after treatment, the visual analogue scale (VAS) was used to evaluate the cervical pain of patients, and ranges of motion in cervical rotation and cervical flexion were measured. The clinical efficacy was evaluated by the Yasuhisa Tanaka 20 Score Scale and neck disability index (NDI). Young's modulus of trapezius muscle was measured by shear wave elasticity imaging (SWEI). **Results:** ① Cervical pain VAS score. After treatment, cervical pain VAS scores in all groups were lower than those before treatment (5.70 ± 0.82 vs 1.43 ± 0.68 points, $t = 37.779$, $P = 0.000$; 5.43 ± 0.81 vs 2.53 ± 0.93 points, $t = 15.945$, $P = 0.000$; 5.43 ± 0.98 vs 3.00 ± 1.13 points, $t = 16.013$, $P = 0.000$). The cervical pain VAS score in the DST group was lower than those in the CST group and the ST group (LSD- $t = 6.040$, $P = 0.000$; LSD- $t = 7.562$, $P = 0.000$). The cervical pain VAS score in the CST group was lower than that in the ST group (LSD- $t = 2.051$, $P = 0.044$). ② Range of motion in cervical rotation. After treatment, ranges of motion in cervical rotation in all groups were greater than those before treatment ($46.60^\circ \pm 10.45^\circ$ vs $63.65^\circ \pm 7.79^\circ$, $t = -9.379$, $P = 0.000$; $45.95^\circ \pm 9.24^\circ$ vs $57.58^\circ \pm 7.54^\circ$, $t = -6.694$, $P = 0.000$; $48.22^\circ \pm 9.96^\circ$ vs $53.72^\circ \pm 9.39^\circ$, $t = -2.298$, $P = 0.000$). The range of motion in cervical rotation in the DST group was greater than those in the CST group and the ST group (LSD- $t = -3.280$, $P = 0.001$; LSD- $t = -5.371$, $P = 0.000$). The range of motion in cervical rotation in the CST group was greater than that in the ST group (LSD- $t = -2.083$, $P = 0.040$). ③ Range of motion in cervical flexion. After treatment, the ranges of motion in cervical flexion in all groups were greater than those before treatment ($28.45^\circ \pm 3.18^\circ$ vs $41.57^\circ \pm 2.88^\circ$, $t = -18.310$, $P = 0.000$; $27.70^\circ \pm 3.07^\circ$ vs $38.95^\circ \pm 3.38^\circ$, $t = -16.843$, $P = 0.000$; $28.15^\circ \pm 3.30^\circ$ vs $35.25^\circ \pm 3.80^\circ$, $t = -9.692$, $P = 0.000$). The range of motion in cervical flexion in the DST group was greater than those in the CST group and the ST group (LSD- $t = -3.482$, $P = 0.001$; LSD- $t = -8.374$, $P = 0.000$). The range of motion in cervical flexion in the CST group was greater than that in the ST group (LSD- $t = -4.901$, $P = 0.000$). ④ Yasuhisa Tanaka 20 Score Scale score. After treatment, Yasuhisa Tanaka 20 Score Scale scores in all groups were higher than those before treatment (7.58 ± 3.87 vs 16.10 ± 2.04 points, $t = -14.437$, $P = 0.000$; 7.38 ± 3.31 vs 13.25 ± 2.10 points, $t = -12.361$, $P = 0.000$; 7.25 ± 2.9 vs 12.65 ± 2.70 points, $t = -10.696$, $P = 0.000$). The Yasuhisa Tanaka 20 Score Scale score in the DST group was higher than those in the CST group and the ST group (LSD- $t = -6.172$, $P = 0.001$; LSD- $t = -6.450$, $P = 0.000$). There was no statistically significant difference in Yasuhisa Tanaka 20 Score Scale score between the CST group and the ST group (LSD- $t = -1.113$, $P = 0.271$). ⑤ NDI. After treatment, NDI in all groups was lower than that before treatment (49.85 ± 15.29 vs $18.93 \pm 12.05\%$, $t = 10.694$, $P = 0.000$; 51.73 ± 15.31 vs $29.95 \pm 9.08\%$, $t = 10.728$, $P = 0.000$; 53.10 ± 12.67 vs $33.85 \pm 10.33\%$, $t = 7.190$, $P = 0.000$). The NDI in the DST group was lower than those in the CST group and the ST group (LSD- $t = 4.622$, $P = 0.001$; LSD- $t = 5.951$, $P = 0.000$). There was no statistically significant difference in NDI between the CST group and the ST group (LSD- $t = 1.790$, $P = 0.077$). ⑥ Young's modulus of trapezius muscle. After treatment, Young's modulus of trapezius muscle in all groups was lower than those before treatment (92.67 ± 17.96 vs $62.80 \pm 13.35\%$, $t = 14.696$, $P = 0.000$; 87.05 ± 12.30 vs $77.03 \pm 13.10\%$, $t = 5.959$, $P = 0.000$; 87.33 ± 14.48 vs $82.58 \pm 15.81\%$, $t = 2.337$, $P = 0.025$). The Young's modulus of trapezius muscle in the DST group was lower than those in the CST group and the ST group (LSD- $t = 4.811$, $P = 0.001$; LSD- $t = 6.044$, $P = 0.000$). There was no statistically significant difference in Young's modulus of trapezius muscle between the CST group and the ST group (LSD- $t = 1.711$, $P = 0.091$). **Conclusion:** In the treatment of CSR, DST combined with Chinese herbal steaming can relieve cervical pain and improve cervical function and trapezius muscle stiffness, and the efficacy is superior to those of CST and ST combined with Chinese herbal steaming.

Keywords cervical spondylosis; radiculopathy; traction; steaming washing therapy; clinical trial

随着人们工作生活方式的改变,颈椎病的发病率逐年增高^[1-3]。神经根型颈椎病是临床上常见的颈

椎病类型,占颈椎病的 60% ~ 71%^[4-5]。临床上采用非手术方法治疗神经根型颈椎病,能够缓解大多数患

者的临床症状,避免手术治疗^[6-9]。牵引治疗被广泛应用于神经根型颈椎病的治疗,具有简便、高效、廉价等优点^[10-11]。然而,临床上部分神经根型颈椎病患者由于症状较重,就诊时不能配合进行常规坐位、卧位牵引治疗,需首先采用镇痛药物缓解临床症状,从而导致患者治疗周期和住院时间延长、满意度降低。为了探索更佳的治疗方法,我们分别采用卧位偏向牵引、卧位常规牵引、坐位牵引 3 种牵引方法联合中药熏蒸治疗神经根型颈椎病,并对 3 种疗法的临床疗效进行了比较,现报告如下。

1 临床资料

1.1 一般资料 选取 2020 年 1 月至 2022 年 3 月在河南省洛阳正骨医院(河南省骨科医院)住院治疗的神经根型颈椎病患者为研究对象。试验方案经河南省洛阳正骨医院(河南省骨科医院)医学伦理委员会审查通过,伦理批件号:KY-2020-002-001。

1.2 纳入标准 ①符合《颈椎病的分型、诊断及非手术治疗专家共识(2018)》中神经根型颈椎病的诊断标准^[12];②年龄 ≤ 75 岁;③入院前 1 个月内未接受与颈椎病相关的治疗;④同意参与本研究,签署知情同意书。

1.3 排除标准 ①有明显手术指征者;②合并严重心脑血管疾病者;③妊娠及哺乳期妇女。

2 方法

2.1 分组方法 采用随机数字表将符合要求的患者随机分为卧位偏向牵引组、卧位常规牵引组和坐位牵引组。

2.2 治疗方法 卧位偏向牵引组患者在入院后即刻开始牵引联合中药熏蒸治疗,卧位常规牵引组和坐位牵引组中不能耐受牵引治疗的患者,首先给予口服塞来昔布胶囊或双氯芬酸钠缓释片缓解疼痛,待疼痛缓解且能耐受牵引治疗后停止服药,开始进行颈椎牵引联合中药熏蒸治疗。

2.2.1 颈椎牵引 卧位偏向牵引组和卧位常规牵引组患者依次进行前屈位牵引 8 d、中立位牵引 2 d、背伸位牵引 4 d,坐位牵引组患者进行常规坐位牵引 14 d。前屈位牵引:患者取仰卧位,颈部垫可塑型荞麦枕,颈部置于前屈 $10^{\circ} \sim 25^{\circ}$ 位。佩戴合适枕颌带,采用多功能颈椎牵引架进行牵引。卧位偏向牵引组患者牵引绳偏向健侧,与脊柱中轴线成约 15° 夹角;卧位常规牵引组牵引绳与脊柱中轴线重叠。牵引重量

为体重的 $1/10$ ^[13-15],每次牵引 30 min。中立位牵引:患者取仰卧位,颈部置于中立位,牵引时牵引绳与脊柱中轴线重叠,牵引重量为体重的 $1/7$,每次牵引 20 min。背伸位牵引:患者取仰卧位,颈部置于背伸 $5^{\circ} \sim 10^{\circ}$ 位,牵引时牵引绳与脊柱中轴线重叠,牵引重量为体重的 $1/10$,每次牵引 30 min。坐位牵引组采用传统坐位枕颌带间歇牵引,患者颈椎前屈 $10^{\circ} \sim 20^{\circ}$,初次牵引重量为 49 N,每隔 1 d 牵引重量增加 9.8 N,但牵引重量须以患者颈部有牵拉感且能耐受为度,且最大牵引重量不超过患者体重的 $1/7$ 。每次牵引 30 min。牵引治疗每日 2 次,2 次牵引间隔时间 > 4 h。

2.2.2 中药熏蒸 所有患者均同时采用中药熏蒸颈部,每日 2 次,每次 30 min,连续治疗 14 d。熏蒸药物组成:珍珠透骨草 30 g、伸筋草 30 g、千年健 20 g、香加皮 20 g、海桐皮 20 g、醋三棱 20 g、醋莪术 20 g、炒桃仁 10 g、红花 10 g、苏木 10 g、艾叶 30 g。

2.3 疗效评价方法 分别于治疗前和治疗结束后,采用视觉模拟量表(visual analogue scale, VAS)评价患者颈部疼痛情况;测量患者颈椎旋转、前屈活动度,采用田中靖久神经根型颈椎病症状量表 20 分法^[16]和颈椎功能障碍指数(neck disability index, NDI)^[17]评价临床疗效;采用剪切波弹性成像技术测量斜方肌的杨氏模量值。

2.4 数据统计方法 采用 SAS 统计软件对所得数据进行统计学分析。3 组患者年龄、身高、体质量、病程、颈部疼痛 VAS 评分、颈椎旋转活动度、颈椎前屈活动度、田中靖久神经根型颈椎病症状量表 20 分法评分、NDI、斜方肌杨氏模量值的组间比较均采用单因素方差分析,性别、病变侧别的组间比较均采用 χ^2 检验;颈部疼痛 VAS 评分、颈椎旋转活动度、颈椎前屈活动度、田中靖久神经根型颈椎病症状量表 20 分法评分、NDI、斜方肌杨氏模量值的组间两两比较均采用 LSD- t 检验,治疗前和治疗结束后的比较均采用 t 检验。检验水准 $\alpha = 0.05$ 。

3 结果

3.1 分组结果 共纳入 120 例患者,卧位偏向牵引组、卧位常规牵引组和坐位牵引组各 40 例。3 组患者基线资料比较,差异无统计学意义,有可比性(表 1)。

3.2 疗效评价结果

3.2.1 颈部疼痛 VAS 评分 治疗前,3 组患者颈部疼痛 VAS 评分比较,差异无统计学意义。治疗结束

后,3 组患者颈部疼痛 VAS 评分比较,差异有统计学意义;卧位偏向牵引组患者颈部疼痛 VAS 评分小于卧位常规牵引组和坐位牵引组($LSD-t=6.040, P=0.000; LSD-t=7.562, P=0.000$),卧位常规牵引组患者颈部疼痛 VAS 评分小于坐位牵引组($LSD-t=2.051, P=0.044$)。治疗结束后,3 组患者颈部疼痛 VAS 评分均小于治疗前。见表 2。

3.2.2 颈椎旋转活动度 治疗前,3 组患者颈椎旋转活动度比较,差异无统计学意义。治疗结束后,3 组患者颈椎旋转活动度比较,差异有统计学意义;卧位偏向牵引组患者颈椎旋转活动度大于卧位常规牵引组和坐位牵引组($LSD-t=-3.280, P=0.001; LSD-t=-5.371, P=0.000$),卧位常规牵引组患者

颈椎旋转活动度大于坐位牵引组($LSD-t=-2.083, P=0.040$)。治疗结束后,3 组患者颈椎旋转活动度均大于治疗前。见表 3。

3.2.3 颈椎前屈活动度 治疗前,3 组患者颈椎前屈活动度比较,差异无统计学意义。治疗结束后,3 组患者颈椎前屈活动度比较,差异有统计学意义;卧位偏向牵引组患者颈椎前屈活动度大于卧位常规牵引组和坐位牵引组($LSD-t=-3.482, P=0.001; LSD-t=-8.374, P=0.000$),卧位常规牵引组患者颈椎前屈活动度大于坐位牵引组($LSD-t=-4.901, P=0.000$)。治疗结束后,3 组患者颈椎前屈活动度均大于治疗前。见表 4。

表 1 3 组神经根型颈椎病患者基线资料

组别	样本量/ 例	年龄/ ($\bar{x} \pm s$, 岁)	性别/例		身高/ ($\bar{x} \pm s$, cm)	体质量/ ($\bar{x} \pm s$, kg)	病程/ ($\bar{x} \pm s$, 月)	病变侧别/例	
			男	女				左侧	右侧
卧位偏向牵引组	40	52.23 ± 9.33	11	29	163.65 ± 6.72	64.95 ± 9.09	3.17 ± 6.61	19	21
卧位常规牵引组	40	50.48 ± 9.56	15	25	164.70 ± 7.70	64.94 ± 10.46	1.94 ± 3.78	23	17
坐位牵引组	40	50.85 ± 8.68	18	22	165.43 ± 7.21	68.53 ± 11.63	1.24 ± 1.95	26	14
检验统计量		$F=0.400$	$\chi^2=2.656$		$F=0.610$	$F=1.570$	$F=1.860$	$\chi^2=2.511$	
P 值		0.670	0.265		0.545	0.213	0.161	0.285	

表 2 3 组神经根型颈椎病患者治疗前后颈部疼痛视觉模拟量表评分

组别	样本量/ 例	颈部疼痛视觉模拟量表评分/($\bar{x} \pm s$, 分)		t 值	P 值
		治疗前	治疗结束后		
卧位偏向牵引组	40	5.70 ± 0.82	1.43 ± 0.68	37.779	0.000
卧位常规牵引组	40	5.43 ± 0.81	2.53 ± 0.93	15.945	0.000
坐位牵引组	40	5.43 ± 0.98	3.00 ± 1.13	16.013	0.000
F 值		1.310	30.020		
P 值		0.273	0.000		

表 3 3 组神经根型颈椎病患者治疗前后颈椎旋转活动度

组别	样本量/ 例	颈椎旋转活动度/($\bar{x} \pm s$, °)		t 值	P 值
		治疗前	治疗结束后		
卧位偏向牵引组	40	46.60 ± 10.45	63.65 ± 7.79	-9.379	0.000
卧位常规牵引组	40	45.95 ± 9.24	57.58 ± 7.54	-6.694	0.000
坐位牵引组	40	48.22 ± 9.96	53.72 ± 9.39	-2.298	0.000
F 值		0.559	14.617		
P 值		0.573	0.000		

表 4 3 组神经根型颈椎病患者治疗前后颈椎前屈活动度

组别	样本量/ 例	颈椎前屈活动度/($\bar{x} \pm s$, °)		t 值	P 值
		治疗前	治疗结束后		
卧位偏向牵引组	40	28.45 ± 3.18	41.57 ± 2.88	-18.310	0.000
卧位常规牵引组	40	27.70 ± 3.07	38.95 ± 3.38	-16.843	0.000
坐位牵引组	40	28.15 ± 3.30	35.25 ± 3.80	-9.692	0.000
F 值		0.562	35.447		
P 值		0.572	0.000		

3.2.4 田中靖久神经根型颈椎病症量表 20 分法评分 治疗前,3 组患者田中靖久神经根型颈椎病症量表 20 分法评分比较,差异无统计学意义。治疗结束后,3 组患者田中靖久神经根型颈椎病症量表 20 分法评分比较,差异有统计学意义;卧位偏向牵引组患者田中靖久神经根型颈椎病症量表 20 分法评分大于卧位常规牵引组和坐位牵引组($LSD-t = -6.172, P = 0.001; LSD-t = -6.450, P = 0.000$),卧位常规牵引组患者田中靖久神经根型颈椎病症量表 20 分法评分与坐位牵引组比较,差异无统计学意义($LSD-t = -1.113, P = 0.271$)。治疗结束后,3 组患者田中靖久神经根型颈椎病症量表 20 分法评分均大于治疗前。见表 5。

3.2.5 NDI 治疗前,3 组患者 NDI 比较,差异无统计学意义。治疗结束后,3 组患者 NDI 比较,差异有

统计学意义;卧位偏向牵引组患者 NDI 小于卧位常规牵引组和坐位牵引组($LSD-t = 4.622, P = 0.001; LSD-t = 5.951, P = 0.000$),卧位常规牵引组患者 NDI 与坐位牵引组比较,差异无统计学意义($LSD-t = 1.790, P = 0.077$)。治疗结束后,3 组患者 NDI 均小于治疗前。见表 6。

3.2.6 斜方肌杨氏模量值 治疗前,3 组患者斜方肌杨氏模量值比较,差异无统计学意义。治疗结束后,3 组患者斜方肌杨氏模量值比较,差异有统计学意义;卧位偏向牵引组患者斜方肌杨氏模量值小于卧位常规牵引组和坐位牵引组($LSD-t = 4.811, P = 0.001; LSD-t = 6.044, P = 0.000$),卧位常规牵引组患者斜方肌杨氏模量值与坐位牵引组比较,差异无统计学意义($LSD-t = 1.711, P = 0.091$)。治疗结束后,3 组患者斜方肌杨氏模量值均小于治疗前。见表 7。

表 5 3 组神经根型颈椎病患者治疗前后田中靖久神经根型颈椎病症量表 20 分法评分

组别	样本量/ 例	田中靖久神经根型颈椎病症量表 20 分法评分/ $(\bar{x} \pm s, \text{分})$		<i>t</i> 值	<i>P</i> 值
		治疗前	治疗结束后		
卧位偏向牵引组	40	7.58 ± 3.87	16.10 ± 2.04	-14.437	0.000
卧位常规牵引组	40	7.38 ± 3.31	13.25 ± 2.10	-12.361	0.000
坐位牵引组	40	7.25 ± 2.99	12.65 ± 2.70	-10.696	0.000
<i>F</i> 值		0.090	25.720		
<i>P</i> 值		0.912	0.000		

表 6 3 组神经根型颈椎病患者治疗前后颈椎功能障碍指数

组别	样本量/ 例	颈椎功能障碍指数/ $(\bar{x} \pm s, \%)$		<i>t</i> 值	<i>P</i> 值
		治疗前	治疗结束后		
卧位偏向牵引组	40	49.85 ± 15.29	18.93 ± 12.05	10.694	0.000
卧位常规牵引组	40	51.73 ± 15.31	29.95 ± 9.08	10.728	0.000
坐位牵引组	40	53.10 ± 12.67	33.85 ± 10.33	7.190	0.000
<i>F</i> 值		0.510	21.510		
<i>P</i> 值		0.603	0.000		

表 7 3 组神经根型颈椎病患者治疗前后斜方肌杨氏模量值

组别	样本量/ 例	斜方肌杨氏模量值/ $(\bar{x} \pm s, \%)$		<i>t</i> 值	<i>P</i> 值
		治疗前	治疗结束后		
卧位偏向牵引组	40	92.67 ± 17.96	62.80 ± 13.35	14.696	0.000
卧位常规牵引组	40	87.05 ± 12.30	77.03 ± 13.10	5.959	0.000
坐位牵引组	40	87.33 ± 14.48	82.58 ± 15.81	2.337	0.025
<i>F</i> 值		1.760	20.810		
<i>P</i> 值		0.176	0.000		

4 讨 论

部分神经根型颈椎病患者由于疼痛等症状较为严重,患者会通过头部偏向健侧缓解不适。由于传统卧位牵引方向与脊柱中轴线一致,此类患者在接受传统卧位或坐位牵引时会导致疼痛症状加重,影响患者

治疗的信心和积极性。因此,我们提出了卧位偏向牵引。该牵引方法在前屈位牵引时沿着患者头部偏斜的方向进行顺势牵引,并根据患者的病变节段及耐受程度通过枕颌带和牵引绳调整牵引的方向。卧位偏向牵引顺应患者的肌肉状态,不会导致患者疼痛症状

加重,因而患者依从性较好、心情放松;而牵引治疗过程中放松的状态能够缓解颈部肌群紧张,减少牵引对神经根的刺激,改善疼痛症状,对患者树立治疗信心有重要作用。相关研究表明,合适的牵引方式有利于颈部生物力学平衡的恢复,进而减轻对神经根的压迫和刺激,缓解疼痛、麻木、活动受限等临床症状^[18-19]。我们采用的卧位牵引治疗疗程为 14 d,包括前屈位牵引 8 d、中立位牵引 2 d、背伸位牵引 4 d,偏向牵引仅在前屈位进行。前屈位偏向牵引能够有效扩大患侧颈椎间隙和椎间孔,更好地缓解患者的临床症状;中立位牵引可避免姿势性颈部偏斜的发生,且作为过渡性牵引,能够避免牵引体位变化过大导致的不适;背伸位牵引可有效地恢复颈椎曲度。中药薰蒸是中医外治法的重要形式,具有扩张血管、加快血液及淋巴循环、增强组织代谢、缓解肌肉紧张及促进炎症因子吸收等作用^[20-21]。苏木、桃仁、红花,具有活血化瘀、行气止痛、祛风伸筋的作用;珍珠透骨草、伸筋草,可祛风湿;艾叶,能除寒湿;诸药共奏活血通络、止痛消肿、祛风除湿之功效。通过薰蒸,药物经过温热效应渗入腠理、肌肉、筋骨,更好地发挥松解颈部软组织、改善炎症病变的作用,进而缓解颈部疼痛等临床症状、改善颈椎活动受限。

本研究结果显示,卧位偏向牵引联合中药薰蒸治疗神经根型颈椎病,能够缓解颈部疼痛、改善颈部功能和斜方肌僵硬,疗效优于常规卧位牵引和坐位牵引联合中药薰蒸。

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