

NAZIV DISERTACIJE: Uticaj neuromobilizacije na funkcionalno osposobljavanje pacijenata s lumbosakralnim radikularnim sindromom

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UVOD

Lumbosakralni radikularni sindrom je jedan od najčešćih neuropatskih sindroma, kojeg uzrokuje kompresija išijadičnog nerva, a najčešće nastaje kao posljedica hernijacije diska. Godišnja prevalenca lumbosakralnog radikularnog sindroma u općoj populaciji varira od 9,9 % do 25 %. Obzirom da oporavak traje u prosjeku 4-6 sedmica, može se vidjeti potreba što učinkovitijeg liječenja ovog problema. Lumbosakralni radikularni sindrom najčešće se tretira fizioterapijom, međutim pravilan odabir terapijskih modaliteta još uvijek predstavlja tačku rasprave među brojnim kliničarima i istraživačima. Među raznim fizioterapijskim tretmanima koji se preporučuju kod lumbosakralnog radikularnog sindroma, neuromobilizacija je podržana kao učinkovita terapijska opcija.

HIPOTEZE

Prva nulta hipoteza: neuromobilizacija ne utiče na funkcionalno osposobljavanje pacijenata s lumbosakralnim radikularnim sindromom. Prva alternativna hipoteza: neuromobilizacija utiče na funkcionalno osposobljavanje pacijenata s lumbosakralnim radikularnim sindromom.

Druga nulta hipoteza: neuromobilizacija ne dovodi do redukcije bola i povećanje ugla fleksije kuka pri SLR testu kod osoba s lumbosakralnim radikularnim sindromom. Druga alternativna hipoteza: neuromobilizacija dovodi do redukcije bola i povećanja ugla fleksije kuka pri SLR testu kod osoba s lumbosakralnim radikularnim sindromom.

Treća nulta hipoteza: neuromobilizacija u terapiji bolesnika s lumbosakralnim radikularnim sindromom ne dovodi do značajnih kliničkih poboljšanja u odnosu na standardne metode fizioterapije. Treća alternativna hipoteza: neuromobilizacija u terapiji bolesnika s lumbosakralnim radikularnim sindromom, dovodi do značajnih kliničkih poboljšanja u odnosu na standardne metode fizioterapije.

CILJEVI ISTRAŽIVANJA

Utvrditi uticaj neuromobilizacije na funkcionalno osposobljavanje pacijenata s lumbosakralnim radikularnim sindromom, utvrditi uticaj neuromobilizacije na smanjenje bola i SLR test kod osoba s lumbosakralnim radikularnim sindromom, utvrditi efektivnost neuromobilizacije, u odnosu na standardne metode fizikalne terapija u liječenju pacijenata s lumbosakralnim radikularnim sindromom

MATERIJAL (ISPITANICI) I METODE ISTRAŽIVANJA

U istraživanje je uključeno 100 ispitanika oba pola, starosne dobi od 30-55 godina s lumbosakralnim radikularnim sindromom, koji su liječeni na odjelu za fizikalnu medicinu i rehabilitaciju Kantonalne bolnice "Dr Safet Mujić" u Mostaru, u periodu od 01.04.2014.-31.03.2015.godine. Ispitanici su podijeljeni u dvije grupe: u ispitivanoj grupi (n=50) provedena je neuromobilizacija uz prethodnu proceduru TENS-a u trajanju od 15 dana, dok je u kontrolnoj grupi (n=50) provedena terapija TENS-om, kao i aktivne vježbe za obim pokretljivosti donjih ekstremiteta, polazeći od skočnog zgloba prema zglobu kuka, te vježbe za obim pokretljivosti kičmenog stuba, također u trajanju od 15 dana. Instrumenti korišteni pri ovome istraživanju u obje grupe su: sociodemografski upitnik, procjena bola pomoću VAS skale, P4 skala za bol, modifikovani Oswestry upitnik onesposobljenja (MODQ), Straight Leg Raise test (SLR), goniometrija, ocjena kliničkog stanja nakon sprovedenog fizioterapijskog tretmana.

REZULTATI ISTRAŽIVANJA

Nakon sprovedene fizioterapije, ispitivana grupa imala je statistički značajno poboljšanje na VAS skali kao i P4 skali ($p < 0.01$), veći obim fleksije kuka pri SLR testu ($p < 0.01$), bolji skor prema modifikovanom Oswestry upitniku ($p = 0.027$), u odnosu na kontrolnu grupu. Ocjena kliničkog stanja ispitanika pokazala je da je 44 % ispitanika u ispitivanoj grupi imalo ocjenu 5, dok je u kontrolnoj grupi ocjenu 5 imalo 24 % ispitanika.

ZAKLJUČAK

Neuromobilizacija je djelotvorna metoda u funkcionalnom osposobljavanju pacijenata s lumbosakralnim radikularnim sindromom

KLJUČNE RIJEČI:

DISSERTATION TITLE: Influence of neuromobilization on functional restoration of patients with lumbosacral radicular syndrome

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INTRODUCTION

Lumbosacral radicular syndrome is one of the most common neuropathic syndromes, caused by compression of sciatic nerve, and it usually occurs as a result of disc herniation. Annual prevalence of lumbosacral radicular syndrome in the general population ranges from 9.9 % to 25 %. Given that the recovery takes an average of 4-6 weeks, we can see the need for more efficient treatment of this problem. Lumbosacral radicular syndrome is usually treated by physiotherapy, however, proper selection of treatment modality is still a point of debate among many clinicians and researchers. Amongst the various interventions that have been suggested, neural mobilization has been advocated as an effective treatment option.

HYPOTHESIS

Zero 1 hypothesis: neuromobilization does not have impact on functional training in patients with lumbosacral radicular syndrome. Alternative 1 hypothesis: neuromobilization has impact on functional training in patients with lumbosacral radicular syndrome.

Zero 2 hypothesis: neuromobilization does not lead to reducing of pain and increasing hip flexion angle during SLR test in patients with lumbosacral radicular syndrome. Alternative 2 hypothesis: neuromobilization leads to reducing pain and increasing hip flexion angle during SLR test in patients with lumbosacral radicular syndrome.

Zero 3 hypothesis: neuromobilization in the treatment of patients with lumbosacral radicular syndrome does not lead to significant clinical improvement compared to standard methods of physiotherapy. Alternative 3 hypothesis: neuromobilization in the treatment of patients with lumbosacral radicular syndrome, leads to significant clinical improvements compared to standard methods of physiotherapy.

RESEARCH GOALS

To determine the effects of neuromobilization on functional restoration of patients with lumbosacral radicular syndrome. To determine the impact of neuromobilization on reducing pain and SLR test in patients with lumbosacral radicular syndrome. To determine the effectiveness of neuromobilization, compared to standard methods of physical therapy in the treatment of patients with lumbosacral radicular syndrome.

MATERIAL (RESPONDENTS) AND METHODS

The study included 100 patients of both sexes, aged 30-55 years with lumbosacral radicular syndrome, treated at the department of Physical medicine and rehabilitation in County Hospital "Dr Safet Mujic in Mostar, during the period from 01.04.2014 till 31.03.2015. Patients were divided into two groups: research group (n=50) received a 15 days rehabilitation program including TENS and neuromobilization, and the control group (n=50) received a 15 days rehabilitation program including active exercises for range of movement for lower limbs, beginning from ankle joint to hip joint, and exercises for range of movement for spine. Instruments that was used in this study in both groups are: sociodemographic questionnaire, VAS scale, P4 scale for pain, modified Oswestry questionnaire, Straight Leg Raise test (SLR), goniometry, evaluation of clinical status after conducting physiotherapy treatment.

RESULTS OF RESEARCH

After the treatment, research group had statistically significant improvement in both VAS score and P4 scale ($p < 0.01$), greater hip flexion during the SLR test ($p < 0.01$), better score on MODQ ($p = 0.027$), compared to control group. After the treatment, in research group, 44 % participants had been rated with mark 5, but in control group 24 % participants had been rated with mark 5.

CONCLUSION

Neuromobilization is beneficial for improving disability in patients with lumbosacral radicular syndrome.

KEY WORDS: