

NAZIV DISERTACIJE: EFIKASNOST KINESIO TAPE TEHNIKE U TRETMANU MIŠIĆNO – KOŠTANIH POREMEĆAJA**Autor:** Dinko Remić**Mentor:** Prof. dr. Bakir Katana**Datum odbrane:** 18.12.2023.**DOI:** <https://doi.org/10.17532/DD.2023.06>**SAŽETAK**

Uvod: Mišićno – koštani poremećaji (MKP) predstavljaju skupinu stanja koja utiču na mišiće, tetive, ligamente, zglobove, periferne živce i potporne krvne žile u tijelu. MKP predstavljaju značajan udio bolesti u cijelom svijetu i imaju znatne ekonomske posljedice. Uobičajeni su kod muškaraca i žena svih dobnih grupa u svim socio – demografskim slojevima društva. Oni su najčešći uzrok jake dugotrajne boli i tjelesne invalidnosti i pogađaju stotine milijuna ljudi širom svijeta. Utiču na sve aspekte života i ograničavaju svakodnevne aktivnosti, ugrožavajući spretnost i pokretljivost. Pogađaju jednu od četiri odrasle osobe u Evropi.

Ispitanici i metode: U istraživanje je bilo uključeno 123 pacijenta oba spola i svih starosnih dobi s dijagnozom MKP gornjih i/ili donjih ekstremiteta. Pacijenti su nasumično podijeljeni u dvije grupe, kontrolnu i eksperimentalnu grupu. U kontrolnoj grupi se primjenjivao standardni protokol terapije za MKP, dok se u eksperimentalnoj grupi primjenjivao standardni protokol za MKP plus KT tehnika na tretiranom segmentu. Instrumenti koji su se koristili u istraživanju su standardizirani upitnici, upitnik o prisustvu bola (The Brief Pain Inventory – Short form- BPI), index funkcionalnosti gornjih ekstremiteta (The upper extremity functional indeks – UEFI), skala funkcionalnosti donjih ekstremiteta (The lower extremity functional scale – LEFS), te uglomjer za mjerenja pokretljivosti zgloba i centimetarska traka za mjerenje obima mišića. Obje grupe učesnika testirane su istraživačkim instrumentima na početku, u toku i nakon terapijskog tretmana. Istraživanje je trajalo od maja 2020. do jula 2022. godine.

Rezultati: Procentualne vrijednosti ukupnog poboljšanja funkcionalnosti gornjih i donjih ekstremiteta ukazuju da je primjena KT uz standardni terapijski protokol efikasnija u rehabilitaciji gornjih ekstremiteta u odnosu na donje, pri čemu je poboljšanje funkcionalnosti gornjih ekstremiteta nakon provedenog terapijskog tretmana sa kinezi trakom za 25% efikasnije od poboljšanja funkcionalnosti donjih ekstremiteta. Regresionom analizom je utvrđeno da statistički značajan uticaj na poboljšanje funkcionalnosti gornjih ekstremiteta ima primjena kinezi trake ($p = 0,002$) i dijagnoza ispitanika koja je terapijski tretirana ($p = 0,030$), a spol ($p = 0,104$) i dužina trajanja terapije u danima ($p = 0,069$) nemaju statistički značajan uticaj. Kod funkcionalnosti donjih ekstremiteta statističku značajnost su imali dijagnoza ispitanika koja je terapijski tretirana ($p = 0,010$), kao i primjena kinezi trake ($p = 0,046$), dok spol ($p = 0,405$) i dužina trajanja terapije u danima ($p = 0,081$) nemaju statistički značajan uticaj.

Zaključak: Primjena Kinesio tape tehnike uz standardni terapijski protokol rehabilitacije MKP je efikasniji metod u odnosu na primjenu standardnog terapijskog protokola bez primjenjene Kinesio tape tehnike.

Ključne riječi: Kinesio tape, mišićno – koštani poremećaji uzrokovani bolom, aktivnosti svakodnevnog života.

DISSERTATION TITLE: EFFECTIVENESS OF THE KINESIO TAPE TECHNIQUE IN THE TREATMENT OF MUSCLOSKELETAL DISORDERS**Author: Dinko Remić****Mentor: Prof. dr. Bakir Katana****Date of defence: 18. December 2023.****DOI: <https://doi.org/10.17532/DD.2023.06>****ABSTRACT**

Introduction: Musculoskeletal disorders (MSDs) represent a group of conditions that affect muscles, tendons, ligaments, joints, peripheral nerves and supporting blood vessels in the body. MKPs represent a significant proportion of diseases worldwide and have significant economic consequences. They are common in men and women of all age groups in all socio-demographic strata of society. They are the most common cause of severe long-term pain and physical disability and affect hundreds of millions of people worldwide. They affect all aspects of life and limit daily activities, compromising dexterity and mobility. They affect one in four adults in Europe.

Participants and methods: 123 patients of both sexes and all ages diagnosed with MSDs of the upper and/or lower extremities were included in the study. The patients were randomly divided into two groups, a control group and an experimental group. In the control group, the standard therapy protocol for MSDs was applied, while in the experimental group, the standard protocol for MSDs plus CT technique was applied on the treated segment. The instruments used in the research were standardized questionnaires, the questionnaire about the presence of pain (The Brief Pain Inventory – Short form – BPI), the upper extremity functional index (UEFI), the lower extremity functional scale (The Lower Extremity Functional Scale – LEFS), and a protractor for measuring joint mobility and a centimeter tape for measuring muscle circumference. Both groups of participants were tested with research instruments at the beginning, during and after the therapeutic treatment. The research lasted from May 2020 to July 2022.

Results: The percentage values of the overall improvement in the functionality of the upper and lower extremities indicate that the application of KT along with the standard therapeutic protocol is more effective in the rehabilitation of the upper extremities compared to the lower ones, whereby the improvement of the functionality of the upper extremities after the therapeutic treatment with kinesio tape is 25% more effective than the improvement lower limb functionality. Regression analysis found that the use of kinesio tape ($p = 0.002$) and the diagnosis of the subject treated therapeutically ($p = 0.030$), gender ($p = 0.104$) and length of therapy in days ($p = 0.069$) do not have a statistically significant influence. Regarding the functionality of the lower extremities, the diagnosis of the subject who was treated therapeutically ($p = 0.010$), as well as the application of kinesio tape ($p = 0.046$) had statistical significance, while gender ($p = 0.405$) and length of therapy in days ($p = 0.081$) did not statistically significant impact.

Conclusion: Application of the Kinesio tape technique along with the standard therapeutic protocol of MSDs rehabilitation is a more efficient method compared to the application of the standard therapeutic protocol without the applied Kinesio tape technique.

Key words: Kinesio Tape, Musculoskeletal Disorders Caused by Pain, Activities of Daily Life.