

EVALUACIJA PRIMJENE STANDARDIZOVANIH TESTOVA ZA PROCJENU FUNKCIONALNOG STANJA OSOBA NAKON MOŽDANOG UDARA

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Sažetak: Hemipareza predstavlja sindrom oštećenja mozga koji dovodi do motorne slabosti jedne polovine tijela praćene sa promjenom senzibiliteta, govora, kao i čestim psihičkim i drugim promjenama bolesnika. Testovi korišteni za mjerenje funkcionalnog oporavka bolesnika sa hemiparezom u kineziterapiji su *Barthel Indeks (BI)*, *Trunk Control Test (TCT)*, *Motoricity index (MI)*, *Ashworth Scala (ASHS)*, *Test UP&GO (TUG)*. Cilj rada je bio da se ispita senzitivnost, specifičnost i ukupna tačnost primjenjivanih testova (*BI, TCT, MI, ASHS, TUG*) kroz procjenu stepena oporavka motornih funkcija, stepena osposobljenosti za aktivnosti svakodnevnog života i analizu efekata kineziterapijskog tretmana bolesnika sa hemiparezom. Istraživanje predstavlja retrospektivnu analizu rehabilitacionog terapijskog tretmana kod 148 bolesnika sa hemiparezom, oba pola, starosti od 45-87, na Odjelenju B za neurorehabilitaciju u Institutu FMIR "Dr Miroslav Zotović" Banja Luka. Standardizovani testovi koje smo koristili na početku i kraju tretmana su: Trunc Control Test, Motoricity Index, Ashworth Scala, Test UP&GO i Barthel. Statističku obradu podataka smo vršili primjenom testa Medijane i Wilcoxon-ovog testa sume rangova, a zatim smo ispitivali njihovu senzitivnost, specifičnost i ukupnu tačnost. Svi podaci koji su dobijeni primjenom navedenih testova su obrađeni i na osnovu njih je vršena procjena stanja bolesnika, upoređivani su testovi sa varijablama (pol, strana lezije, starosne grupe) i ispitivana je njihova senzitivnost (Se), specifičnost (Sp) i ukupna tačnost (UT). Korišteni testovi su pokazali statistički značajna poboljšanja funkcionalnog statusa na otpustu u odnosu na prijem izuzev kod Ashwort skale gde nismo imali statistički značajnog poboljšanja na kraju tretmana. Izdvojili smo Barthel Index kao zlatni standard za procjenu senzitivnosti, specifičnosti i ukupne tačnosti ostalih testova. Najznačajnije rezultate pokazao je test UP&GO (Se=74,2%, Sp= 40%, UT= 77%), zatim MI (Se= 71.7%, Sp= 30%, UT=68.9%) a najniže vrijednosti među njima je imao TCT (Se= 52.9%, Sp= 80% i UT= 54.7%). Pokazalo se da nisu svi primenjeni testovi jedanko validni, senzitivni i specifični za procjenu funkcionalnog stanja bolesnika sa hemiparezom.

Ključne riječi: procjena, mjerni instrumenti, moždani udar

EVALUATION OF THE APPLICATION OF STANDARDIZED TESTS FOR ASSESSING THE FUNCTIONAL STATE OF PEOPLE AFTER A STROKE

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Abstract: Hemiparesis is a syndrome of brain damage that leads to motor weakness of one half of the body accompanied by changes in sensitivity, speech, as well as frequent psychological and other changes in the patient. The tests we use to measure the functional recovery of patients with hemiparesis in kinesitherapy are Barthel Index (BI), Trunk Control Test (TCT), Motoricity index (MI), Ashworth Scala (ASHS), Test UP& GO (TUG). The aim of the work was to examine the sensitivity, specificity, and overall accuracy of the applied tests (BI, TCT, MI, ASHS, TUG) through the assessment of the degree of recovery of motor functions, the degree of competence for activities of daily life and the analysis of the effects of kinesitherapy treatment of patients with hemiparesis. The research is a retrospective analysis of rehabilitation therapy treatment in 148 patients with hemiparesis, both sexes, aged 45-87, conducted at Department B in the Institute of Physical Medicine "Dr. Miroslav Zotović" Banja Luka. The standardized tests we used at the beginning and end of the treatment are: Trunk Control Test, Motoricity Index, Ashworth Scala, Test UP& GO and Barthel. We performed statistical processing of the data using the Median test and the Wilcoxon rank sum test, and then examined their sensitivity, specificity and overall accuracy. Variables (gender, side of lesion, age groups) and their sensitivity (Se), specificity (Sp) and overall accuracy (UT) were investigated. The tests used showed significant improvements in functional status at discharge compared to admission except for the Ashworth scale where we did not have a significant improvement at the end of the treatment. We singled out the Barthel Index as the gold standard for assessing the sensitivity, specificity and overall accuracy of other tests. The most significant results were shown by the UP&GO test (Se=74.2%, Sp= 40%, UT= 77%), followed by MI (Se= 71.7%, Sp= 30%, UT= 68.9%), and the lowest values among them were TCT (Se= 52.9%, Sp= 80% and UT= 54.7%). It has been shown that not all applied tests are equally valid, sensitive and specific for assessing the functional state of patients with hemiparesis.

Keywords: assessment, measuring instruments, stroke