Neinvazivni test skrivenog cilja za probir osoba s mogućim početnim spoznajnim urušavanjem

/ A Non-invasive Hidden-Goal Test for Screening of Persons with Possible Cognitive Impairment

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Razvili smo novi uređaj koji pomaže u ranoj dijagnozi blagog kognitivnog oštećenja (*mild cognitive impairment* – MCI, odnosno blagog neurokognitivnog poremećaja prema DSM-5) i demencije (velikog neurokognitivnog poremećaja prema DSM-5, najčešće uzrokovanog Alzheimerovom bolešću - AB). Sustav se temelji na određivanju pozicije cilja koji nakon kratkotrajnog prikazivanja više nije vidljiv, pa ispitanik mora svoju navigaciju do cilja temeljiti na prethodno upamćenom položaju cilja u odnosu na svoj početni položaj (četiri egocentričke podvarijante) ili zadane orijentire (četiri

We have developed a new device that helps in early diagnosis of mild cognitive impairment (MCI or minor neurocognitive disorder according to DSM-5) and dementia (major neurocognitive disorder, mainly caused by Alzheimer's disease, AD). The system is based on the hidden goal task test in which the aim is to find a target that is not visible, but instead the navigation must be based on previously memorized target position in relation to the starting position (four egocentric test subvariants) or other navigational landmarks (four allocentric test subvariants). In this respect it resembles the

alocentričke podvarijante testa). U tom smislu ovaj test podsjeća na Morrisov vodeni labirint za glodavce. Testiranje prosječno traje oko 20 minuta te omogućuje brz, jeftin i neinvazivan dijagnostički postupak. Sustav je namijenjen klinikama i znanstvenoj zajednici, farmaceutskoj industriji te zdravstvenim i drugim ustanovama koje se brinu za starije osobe za koje je važno rano otkrivanje spoznajnog urušavanja, kao i kontinuirano praćenje njihovog statusa i uspješnosti terapijskih postupaka. Tijekom predavanja bit će prikazani naši preliminarni rezultati, koji su pokazali izvrstan potencijal testa za probir osoba s početnim spoznajnim urušavanjem.

Morris water maze task for rodents. The testing procedure has an average duration of about 20 minutes, which allows for a fast, low-cost, and non-invasive diagnostic procedure. The system is intended for the clinical and scientific community, pharmaceutical industry, healthcare institutions, and other organizations caring for the elderly and other populations for which early detection of cognitive impairment is important, as is ongoing monitoring of their status and the success of therapeutic procedures. During the meeting, I will present our preliminary results, which showed excellent potential of the hidden goal test for cognitive impairment population screening.