The Effects of Cranio-Sacral Therapy on Brain Function Quotient of Elderly with Long-term Care Insurance Service

Journal title: Journal of the Korea Academia-Industrial cooperation Society

Volume 17, Issue 1, 2016, pp.474-484

Publisher: The Korea Academia-Industrial cooperation Society

DOI: 10.5762/KAIS.2016.17.1.474

Title & AuthorsThe Effects of Cranio-Sacral Therapy on Brain Function Quotient of Elderly with Long-

Lee, Jung-eun;

Abstract

This study was performed to identify the effects of the improvement of brain function by CST on the elderly with the 2nd or 3rd grade of long-term care insurance service. A quasi-experimental design using a nonequivalent control group, prepost test was used. A total of 12 elders (6 in the experimental group and 6 in the control group) were recruited. Upledger CST(10-Step Protocol) was performed on each subject for 50 minutes per session, once a week, for a total of 8 treatments over an 8 week period from Jan to Feb 2015. The brain function quotient was measured before the 1st CST and after the last CST by portable EEG measurement device using a 2 Channel neuro-feedback system. The data was analyzed by SPSS (Ver. 18.0) program. After CST intervention, the attention quotient (AQ), level of tension, anti-stress quotient (ASQ), emotion quotient (EQ) and brain quotient (BQ) of the experimental group was significantly better than that of the control group. These results showed that the CST was effective in reducing the level of fatigue by the AQ, increasing the physical and psychological stress relief by the ASQ, emotional balance by the EQ, and improving the total brain function by the BQ. Therefore, CST can be used as an effective intervention for improving the health and brain function of the elderly in health facilities.

Keywords

Brain function quotient; Cranio-sacral therapy; Elderly; Long-term care insurance;

Language

Korean

References

- 1.Lee YW, Park KH, Seong YS. A study on changes of primary Caregivers' fatigue, depression and life satisfaction by using dementia day care service. J Korean Academy of Adult Nurs. 20(3), 443-451, 2008.
- 2.National Health Insurance Service(2008, June). Judgement rating for long-term care insurance. http://www.longtermcare.or.kr/portal/ny/jsp/p/d/01/nypdfaqlst_R.jsp?act=VIEW(accessed July 22, 2015)
- 3. Upledger JE. Craniosacral therapy I: Study guide. UI Publishing, Florida, 2002.
- 4.Upledger JE, Kaplan BS, Bourne RA, Zonderman RB. The effects of Upledger craniosacral therapy on post traumatic stress disorder symptomology in Vietnam combat veterans. Subtle Energy & Energy Medicine 11(2), 123-143, 1993.
- 5. Upledger JE. Craniosacral therapy and scientific research part I. Palm Beach Gardens, Florida, 2003.
- 6.Guillermo A. Mataran-Penarrocha, Adelaida Maria Castro-Sanchez, Gloria Carballo Garcia, Carmen Moreno-Lorenzo, Tesifon Parron Carreno and Maria Dolores Onieva Zafra. Influence of craniosacral therapy on anxiety, depression and quality of life in patients with fibromyalgia. eCAM 2009(3), 1-9, 2009.

- 7.Harrison RE, Page JS. Multipractitioner Upledger craniosacral therapy: descriptive outcome study 2007-2008. J Alternative Complement Med. 17(1), 13-17, 2011. DOI: http://dx.doi.org/10.1089/acm.2009.0644 crossref(new window)
- 8.Helen E, Hans-Christian Ostgaard, Anna G, Pia M, Ann-Charlotte Linner, Monika FO. Effects of craniosacral therapy as adjunct to standard treatment for pelvic girdle pain in pregnant women: a multicenter, single blind, randomized controlled trial. Acta Obstetricia et Gynecologica Scandinavica 92(7), 775-782, 2013. DOI: http://dx.doi.org/10.1111/aogs.12096 crossref(new window)
- 9.Haller H, Cramer H, Werner M, Dobos G. Treating the sequelae of postoperative meningioma and traumatic brain injury: A case of implementation of craniosacral therapy in integrative inpatient care. J Alternative and Complementary Med. 21(2), 110-112, 2015. DOI: http://dx.doi.org/10.1089/acm.2013.0283 crossref(new window)
- 10.Choi SS, Park HS. The effects of craniosacral therapy on chronic headache. J Korean Rehabilitation Nurs. 7(1), 68-77, 2004.
- 11.Jung MR. The effect of craniosacral therapy on relieving the stress of high school girls. Unpublished master's thesis, Chosun University, Gwangju, 27-30, 2006.
- 12.Lee JE, Chae MS, Hyun KS, Park PW. Effects of neurofeedback and cranio-sacral therapy on fatigue and the stress resistance in korean middle aged women. J Korean Acad Psychiatr Ment Health Nurs. 17(2), 21-31, 2008.
- 13.Nam HS. The effect of massage on fatigue element and stress hormones: The comparative study of meridian massage and craniosacral therapy. Unpublished master's thesis, Hansung University, Seoul, 32-44, 2010.
- 14.Lyou JL. The effects of cranio sacral therapy on pain and muscle tension for middle-aged women. International J Complementary, Integrative and Alternative Med. 7(1), 37-56, 2011.
- 15.Jeun JS. The effects of the stress and the balance for left & right scapula with the craniosacral therapy. Unpublished master's thesis, Taejon University, Taejon, 49-51, 2012.
- 16.Lee JE, Hyun KS. Content analysis on experiences in middle aged women participating in neurofeedback, cranio-sacral therapy and combine therapy. J Korea Academia-Industrial Cooperation Society 13(3), 1042-1053, 2012. DOI: http://dx.doi.org/10.5762/KAIS.2012.13.3.1042 crossref(new window)
- 17.Oh US. The effect of craniosacral therapy on insomnia. Unpublished master's thesis, Hansung University, Seoul, 30-33, 2012.
- 18.Shin SJ, Lee MN, Lee IH. The effects of Thai massage on women 20s, lower edema, fatigue substance and stress hormone. J Korea Soc. Beauty and Art 15(1), 243-252, 2014.
- 19.Lee JE. Effects of cranio-sacral therapy on self-regulation and brain quotient in practitioner and client. J Investigative Cosmetology 11(1), 17-24, 2015. DOI: http://dx.doi.org/10.15810/jic.2015.11.1.003 crossref(new window)
- 20.Lee JE. Effects of neurofeedback, cranio-sacral therapy and mixed therapy on fatigue, stress and the brain quotient in korean middle aged women. J. Kor. Soc. Cosm. 16(4), 1028-1040, 2010.
- 21.Ko YM, Hwang HJ, Han EH, Jang TS. The effect of craniosacral therapy on brain wave and electrocardiogram in the elderly. Kor. J. Aesthet. Cosmetol. 10(4), 879-886, 2012.
- 22.Lee JE, Youn MK, Hyun KS, Park PW, Lee KS, Jeong DL. The effects of neurofeedback training on brain function quotient of elderly with long-term care insurance service. J East-West Nursing Research 18(2), 111-119, 2012.
- 23. Jasper HH. The ten-twenty electrode system of the international federation. Electroencephalography and Clin Neurophysiology 56(6), 898-902, 1958.

- 24.Ryu CS, An MH, Na YC, Cho JO, Han YS, Kim KH, Park PW. A portable neurofeedback system and EEG-analysis methods for evaluation. World Congress on Medical Physics and Biomedical Engineering Proceeding, 1060-1062, 2006.
- 25.Kim YJ, Kim HH, Park JK, Chae HK, Park MA, Kang KM, Cho SH, Min YK, Chang NK. The evaluations of the functional state of the brain by brain wave measure during problem-solving activities. Korean J Biological Education 28(3), 291-301, 2000.
- 26. Park PW. Interpretation method of EEG. Korea Research Institute of Jungshin Science, Seoul, 99-113, 2005.
- 27.Shim DH, Yi SH. Comparison of brain function scores between computer-game addicted and not addicted children in performing left brain hemisphere typed cognitive tasks. The Korean J the Human Development 12(4), 191-207, 2005.
- 28.Kim YR. Effect of aroma oil back massage on the brain wave and psychological factors in perimenopause women. J Investigative Cosmetology 10(1), 45-51, 2014. DOI: http://dx.doi.org/10.15810/jic.2014.10.1.006 crossref(new window)
- 29.Park HR, Park PW, Song GW, Lim GW. Socio-economic effects on brain functions and symptoms of child behavioral problems. J Korea Academia-Industrial Cooperation Society 16(1), 462-470, 2015. DOI: http://dx.doi.org/10.5762/KAIS.2015.16.1.462 crossref(new window)
- 30.Lubar JF, Swartwood MO, Swartwood JN, O'Donnell PH. Evaluation of the effectiveness of EEG neurofeedback training for ADHD in a clinical setting as measured by changes in T.O.V.A. scores behavioral rating and WISC-R performance. Biofeedback & Self Regulation 20, 83-99, 1995. DOI: http://dx.doi.org/10.1007/BF01712768 crossref(new window)
- 31.Peniston EG, Marrinan DA, Deming WA, Kulkosky PJ. EEG alpha-theta brain wave synchronization in Vietnam theater veterans with combat-related post-traumatic stress disorder and alcohol abuse. Advances in Medical Psychotherapy 6, 37-50, 1993.
- 32. Maulsby RL. An illustration of emotionally evoked theta rhythm in infancy: hedonic hypersynchrony. EEG and Clinical Neuroscience Letters 143, 10-14, 1971. DOI: http://dx.doi.org/10.1016/0013-4694(71)90186-6
- 33. Woodruff D. Craniosacral therapy: A brief description. Victoria Pain Clinic Publishing, Victoria, 1995.
- 34. Horn C. 13 ways to wipe out pain, Natural Health Jan, 37-45, 1999.
- 35.Kim DS, Chung YS, Par SK. Relationship between the stress hormone, salivary cortisol level and stress score by self-report measurement. Korean J Health Psychology 9(3), 633-645, 2004.
- 36. Youn MK, Lee JE, Kim SK, Lee SW, Kim JH, Woo KO. The effects of oriental herbal tea on the brain function quotient of elders at health facility. J East-West Nursing Research 19(2), 128-137, 2013. DOI: http://dx.doi.org/10.14370/jewnr.2013.19.2.128 crossref(new window)
- 37. Jeong ES. The effect of the integrated therapy of neurofeedback, brain gymnastics, and oriental herbal tea on the improvement of brain functions and the quality of life of elders living alone. Unpublished master's thesis, Seoul University of Buddhism, Seoul, 54-64, 2015.
- 38.Peniston EG, Marrinan DA, Deming WA, Kulkosky PJ. EEG alpha-theta brain wave synchronization in Vietnam theater veterans with combat-related post-traumatic stress disorder and alcohol abuse. Advances in Medical Psychotherapy 6, 37-50, 1993.
- 39.Lee SY, Lee JY, Kim JS. Lee JH, Kang SS: Flavonoids from the seeds of zizyphus jujuba var. spinosa. Korean J Pharmacognosy 43(2), 127-136, 2012.
- 40.Lee JE, Park PW, Hyun KS. The Relationship between Fatigue, Stress resistance and Emotion in Korean middle aged women. J Korea Academia-Industrial cooperation Society, 12(3), 1145-1150, 2011. DOI: http://dx.doi.org/10.5762/KAIS.2011.12.3.1145 crossref(new window)

- 41. Yoon BS. BIS and BAS related difference on cognitive and psychophysiological responses to the affective stimuli. Korean J Psychological Association General 29(4), 679-705, 2010.
- 42. Weon HW, Lim JY, Son HK, Kim MA. The effects of the neurofeedback training on the general health status, mental health and problem behavior, and brain function quotient among high school students. J Korea Academia-Industrial cooperation Society 14(12), 6309-6316, 2013. DOI: http://dx.doi.org/10.5762/KAIS.2013.14.12.6309 crossref(new window)
- 43. You YH, Jeong YT. Effectiveness of participating TGMD-2 basis program for intellectual & development disability in brain quotient and exercise perform capability. J Korean Society of Adapted Physical actimity and Exercise 23(1), 49-63, 2015. crossref(new window)
- 44.Choi NS, Ahn SK, Park PW. Research on the difference of anti-stress by classification of puberty development index. J Korea Academia-Industrial cooperation Society 16(4), 2505-2510, 2015. DOI: http://dx.doi.org/10.5762/KAIS.2015.16.4.2505 crossref(new window)

45.Im GY, Park HR, Choi NS, Park PW. A study of correlation between big 5 personality traits and SRQ of brain quotient. J Korea Academia-Industrial cooperation Society 16(6), 3760-3768, 2015. DOI: http://dx.doi.org/10.5762/KAIS.2015.16.6.3760 crossref(new window)

http://koreascience.or.kr/article/ArticleFullRecord.jsp?cn=SHGSCZ_2016_v17n1_474