

tDCS electrodes and NIRS optodes from the rats. Therefore, we performed a series of preliminary experiments to determine the minimal amount of anesthetic dose that could anesthetize the movement of each rat for at least 1 hr. Considering our efforts to control the experimental parameters, we feel confident that individual differences in tDCS after-effects are partly due to the individual's intrinsic characteristics associated with DC uptake. Nevertheless, since our experimental data may not be sufficient to elucidate the physiological meaning and mechanism of our findings, further studies with more sophisticated parameter control need to be performed in the future. For example, one of the promising topics we want to investigate in our future study is to observe hemodynamic response changes when a longer DC stimulation (e.g., 20-min) is applied to the rat brain, which would show how long the linear increase of oxy-Hb concentration holds.

Acknowledgments

This research was supported in part by the National Research Foundation of Korea (NRF) grant funded by the Korean government (MSIP) (No. NRF-2012R1A2A2A03045395) and a grant of the Korea Health Technology R&D Project through the Korea Health Industry Development Institute (KHIDI), funded by the Ministry of Health & Welfare, Republic of Korea (No: HI13C1501).