

Publication

Animal-assisted therapy for patients in a minimally conscious state : a randomized two treatment multi-period crossover trial

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**ID** 4514726**Author(s)** Hediger, Karin; Petignat, Milena; Marti, Rahel; Hund-Georgiadis, Margret**Author(s) at UniBasel** [Hediger, Karin](#) ; [Marti, Rahel](#) ;**Year** 2019**Title** Animal-assisted therapy for patients in a minimally conscious state : a randomized two treatment multi-period crossover trial**Journal** PLoS ONE**Volume** 14**Number** 10**Pages / Article-Number** e0222846

To investigate if animal-assisted therapy (AAT) leads to higher consciousness in patients in a minimally conscious state during a therapy session, measured via behavioral reactions, heart rate and heart rate variability.; In a randomized two treatment multi-period crossover trial, 10 patients in a minimally conscious state participated in eight AAT sessions and eight paralleled conventional therapy sessions, leading to 78 AAT and 73 analyzed control sessions. Patients' responses during sessions were assessed via behavioral video coding and the Basler Vegetative State Assessment (BAVESTA), heart rate and heart rate variability (SDNN, RMSSD, HF and LF). Data were analyzed with generalized linear mixed models.; Patients showed more eye movements (IRR = 1.31, 95% CI: 1.23 to 1.40, $p < 0.001$) and active movements per tactile input during AAT compared to control sessions (IRR = 1.13, 95% CI: 1.02 to 1.25, $p = 0.018$). No difference was found for positive emotions. With BAVESTA, patients' overall behavioral reactions were rated higher during AAT ($b = 0.11$, 95% CI: 0.01 to 0.22, $p = 0.038$). AAT led to significantly higher LF ($b = 5.82$, 95% CI: 0.55 to 11.08, $p = 0.031$) and lower HF ($b = -5.80$, 95% CI: -11.06 to -0.57, $p = 0.030$), while heart rate, SDNN, RMSSD did not differ.; Patients in a minimally conscious state showed more behavioral reactions and increased physiological arousal during AAT compared to control sessions. This might indicate increased consciousness during therapeutic sessions in the presence of an animal.; ClinicalTrials.gov NCT02629302.

Publisher Public Library of Science**ISSN/ISBN** 1932-6203**edoc-URL** <https://edoc.unibas.ch/72119/>**Full Text on edoc** Available;**Digital Object Identifier DOI** 10.1371/journal.pone.0222846**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/31574106>**ISI-Number** MEDLINE:31574106**Document type (ISI)** Journal Article