**Hypnosis, meditation, and self-induced cognitive trance to improve post-treatment oncological patients’ quality of life.**

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**Introduction:** A symptom cluster is very common among oncological patients: cancer-related fatigue (CRF), emotional distress, sleep difficulties, pain, and cognitive difficulties. Clinical applications of interventions based on non-ordinary states of consciousness, mostly hypnosis and meditation, are starting to reveal encouraging results in terms of improvements of these symptoms. However, these studies often focused on breast cancer patients, with methodological limitations (e.g., small sample size, no control group, no follow-up). Another non-ordinary state of consciousness may also have therapeutic applications in oncology: self-induced cognitive trance (SICT). SICT is inherited from traditional shamanic practice and seems to differ from hypnosis and meditation, as it involves the body more directly. Previous case studies reported anecdotic subjective experience of pain decrease and strength increase during SICT. Thus, investigating its clinical applications, along with hypnosis and meditation interventions, could help improving available therapeutic options in oncology.

**Objectives:** This preference-based longitudinal controlled superiority trial aims at (1) evaluating the short- and long-term clinical benefits of hypnosis, meditation, and SICT in terms of CRF, emotional distress, sleep difficulties, and pain (primary outcomes), as well as other psychological variables in patients with cancer; (2) measuring the evolution of phenomenological and neurobiological correlates of these three interventions; and (3) confirming the biopsychosocial model of hypnosis and investigating whether meditation and SICT responsiveness are mediated by the same mechanisms as hypnosis.

**Methods:** To test the effectiveness of the interventions, data will be collected with questionnaires, free recall recordings, neurobiological measures (i.e., EEG, EMG, ECG, respiration, body temperature) and directly from the medical record (tumor markers rates) at four time points: before inclusion in the study (baseline); immediately after the intervention; and at 3- and 12-month follow-up. The longitudinal data in each group will then be measured. Preliminary data will be presented on the poster.

**Discussion:** In addition to standard cancer therapies, there is a growing interest from patients in complementary approaches, such as hypnosis, meditation, and SICT. The results of this study will be useful to increase knowledge about short- and long-term effectiveness of 3 group interventions for CRF, emotional distress, sleep, pain, and cognitive difficulties in patients with different cancers. They will also allow a better understanding of the phenomenological and neurophysiological correlates of these 3 states.