

P01-133 - MODIFYING RESPIRATORY FUNCTIONALITY IN HEALTHY SUBJECTS: TOWARDS DEVELOPMENT OF ANTI-PANIC BREATHING THERAPY

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Objectives: Several studies showed respiratory irregularities in patients with Panic Disorder (PD). This led to the development of the Breathing Therapy, a therapeutic strategy aimed to modify dysfunctional respiratory patterns. However, it remains unclear whether and how BT regularize respiration. The aim of this study was to evaluate whether and how a single performance of a specific respiratory technique could modify respiration at rest.

Methods: Twenty-eight healthy subjects were randomly assigned to two groups, performing either a slowed 9-breaths-per-minute respiration (group 1) or a “combined” respiration (group 2) so as to evaluate the most effective respiration able to produce respiratory modifications. Respiratory recording took 40 minutes including basal respiration (T1), breathing technique (T2), natural breathing (T3). We evaluated Tidal Volume (VT), respiratory frequency (RF) and end-tidal PCO₂ (PetCO₂) standard deviations (SD), Approximate Entropy (ApEn).

Results: In both groups ApEn values significantly decreased from T1 to T3. However, we observed an increase of ApEn values from T2 to T3 and of VT'SD from T1 to T2. In group 2 RF'SD decreased and PetCO₂'SD increased from T1 to T3. RF'SD increase in both groups from T2 to T3.

Conclusion: Both techniques could modify respiratory physiology, leading to reduced ApEn values and increased respiration variability. The repeated practice of such respiratory techniques could modify respiratory functioning. Further studies are needed to determine which technique has the highest likelihood to reduce breathing irregularities and its possible use for the treatment of PD.