P35.12

Respiratory irregularity in respiratory subtype panic

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Objectives: The role of respiratory function in Panic Disorder (PD) is controversial and the nature of respiratory abnormalities remains unclear. We investigated the relationship between respiratory physiology and hyperreactivity to CO_2 in PD patients.

Method: Baseline breathing patterns of 14 PD patients with prominent respiratory symptoms during the 35% CO_2 challenge (respiratory subtype) and 10 PD patients without respiratory symptoms (non-respiratory subtype) were compared. The respiratory physiology assessment was carried out using a "breath by breath" Quarkb2 stationary testing system. The irregularity of the breathing patterns was measured by the Approximate Entropy Index (ApEn).

Results: Respiratory subtype group reported a greater irregular baseline pattern of tidal volume (TV) and inspiratory drive (TV/TI) than non-respiratory subtype group. The former also reported higher global anxiety, global symptomatological reactivity and rate of induced panic attacks during hypercapnia and stronger respiratory symptoms and global panic symptomatology during spontaneous panic attacks than the latter.

Conclusions: Symptomatological hyperreactivity to hypercapnia is related to an abnormal baseline respiratory function. It supports the idea of an abnormal regulation of the respiratory function as a key mechanism in Panic Disorder.

P35.13

Effects of venlafaxine on CO_2 hyperreactivity in panic disorder

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Objective: evaluate the effects of one week treatment with venlafaxine on CO_2 hyperreactivity in patients with PD

Method: 14 outpatients with PD were enrolled. All subjects underwent 35% CO_2 challenge before starting treatment and after one week of treatment with venlafaxine (75 mg/day). The reactivity to CO_2 was assessed by Visual Analogue Scale for Anxiety (VAS-A). The severity of symptomatology was assessed by Panic Associated Symptoms Scale (PASS), Fear Questionnaire (FQ) and Hamilton Anxiety Scale (HAM-A) on day 0 and 7.

Results: a significant decrease of reactivity to CO_2 after 7 days of treatment with venlafaxine was found. No significant differences were found in the scores of psychometric scales after one week of treatment and no significant correlation between changes in the scores of psychometric scales and the measures of anxious reactivity to CO_2.

Conclusions: the results showed a significant reduction of reactivity to CO_2 in patients with PD suggesting that venlafaxine has anti-panic proprieties.

P35.14

The language of dyspnea in panic disorder

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Objectives: Dyspnea is one of the main symptoms of panic attacks and the "false suffocation alarm theory" proposed by Donald Klein suggested a central role of respiration in panic disorder.

Since, similarly to pain, dyspnea is a multidimensional concept the possibility to elaborate the various facets of this symptom might give a clue on the underlying pathophysiological processes. We investigated dyspnea prolife to identify specific descriptors of respiratory discomfort related to CO_2 induced panic attacks.

Method: Fifty patients with panic disorder underwent the 35% CO_2 challenge and immediately after, together with standardized scales used to measure CO_2 reactivity, filled a validated list of 19 descriptors of breathing discomfort. Multiple regression and factor analyses were applied.

Results: Factor analysis showed that anxiety reactivity to CO_2 was in the same factor together with breathing descriptors related to suffocation and inspiratory discomfort. Among those descriptors, "I feel that my breath stops" was the only significant predictor (beta=.49±.19, t=2.6; p<.02) of CO_2 induced anxiety.

Conclusions: Inspiratory discomfort and sensation of suffocation seem to be the types of dyspnea specifically related to CO_2 induced anxiety in panic patients.

P35.15

Treatment of panic disorder via the Internet: two randomized trials

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Results from two randomized trials are presented. The first controlled study evaluated an Internet-delivered self-help program plus minimal therapist contact via email for people suffering from panic disorder. Out of the 500 individuals screened using the self-administered diagnostic instrument Composite International Diagnostic Interview in shortened form (World Health Organization, 1999) 41 fulfilled the inclusion criteria. These participants were randomized to either treatment via the Internet or to a waiting-list control. The main components of the treatment were psychoeducation, breathing retraining, cognitive restructuring, interoceptive exposure, in vivo exposure, and relapse prevention. From pre- to posttest self-help participants improved significantly more on almost all dimensions. The results from this experiment generally provide evidence for the continued use and development of self-help programs for panic disorder distributed via the Internet. Preliminary results from the second trail will also be presented.

P35.16

Comorbidity in panic disorders

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There have been studied 50 patients with a diagnosis of panic disorder selected according to the DSM-IV criteria.

The comorbidity of panic disorders with other psychiatric disorders has been assessed in terms of frequency and time relation. This aspect has been diacronous studied starting with the onset of panic disorder, onset that generally precedes the index assessment.

Among more frequent comorbid states have been registered: anticipatory anxiety (76% of cases), hypochondriac preoccupations (72%), agoraphobia (62%), depression (42%), alcohol abuse (36%).

The time relation between panic disorders and comorbid states has been analyzed considering the onset of the panic disorder.

Anticipatory anxiety, agoraphobia, hypochondriac preoccupation and alcohol abuse have started predominantly in the first 6 months since the onset of panic disorder, and depressive episodes occurred after more than a year from onset. The high rates of comorbidity