

P01-135 - **ANXIOGENIC PROPERTIES OF A VIRTUAL REALITY SIMULATION FOR PANIC DISORDER WITH AGORAPHOBIA**

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Objectives: There are several useful methods to induce anxiety in patients with panic disorder with agoraphobia (PDA). Our aim was to ascertain if a virtual reality simulation could induce anxiety and physiologic alterations in PDA patients.

Methods: 10 healthy controls (HC) and 10 patients who fulfilled DSM-IV criteria for PDA were recruited for this study. Before and after the experiment the anxiety level was measured with the Subjective Units of Distress Scale (SUDS), the Diagnostic Symptom Questionnaire (DSQ) was used to ascertain panic attack symptoms. The heart rate, skin conductance and respiration parameters were monitored during the exposure to the VR. The virtual reality simulation was a 3D computer animation of a short bus trip, from a first person perspective. The Igroup Presence Questionnaire (IPQ) was used to measure the sense of presence.

Results: PDA patients had higher familial history of panic disorder. From the 10 PDA patients only 3 were not taking medications. In PDA patients the VR exposure increased anxiety levels, they also had higher scores in the DSQ and two of them had panic attacks. Compared to the HC, the PDA patients had higher skin conductance levels, electrodermal response magnitude, respiratory rate, tidal volume, and respiratory rate irregularities. The heart rates were higher for patients who had panic attacks, followed by the HC and the non-panicking patients. Regarding the sense of presence the two groups were similar.

Conclusion: This study indicated that VR exposure may induce anxiety, electrodermal and respiratory alterations in patients with PDA.