The role of challenges in the research for the etiology of panic disorder
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Experimentally-induced challenges play important role in the research concerning the etiopathogenesis of panic disorder (PD). Through challenges, we are able to provoke anxiety, or even panic attack to a patient, something which enables us to investigate it in a safe and controlled setting. Our main purposes in using challenges are first to advance research concerning the etiopathogenesis of PD and anxiety in general, and second to achieve a better differentiation between PD and other anxiety disorders, progress, which eventually may improve our therapeutic capabilities. In this paper, we review these challenges with a critical attitude. Among the most important challenges are included the lactate and bicarbonate infusions, caffeine challenges, challenges which change serotonin, noradrenaline, and benzodiazepine neuronal system's functioning, challenges which change respiratory function (carbon dioxide inhalation, hyperventilation, voluntary breath-holding), and psychological challenges (provocation of catastrophic misinterpretation, through the use of various means, for instance words which imply the presence of threat, or information concerning certain bodily functions). The findings from researches concerning the use of challenges, are discussed in reference to their utility in generating models which will illuminate the etiopathogenesis of PD. Progress in this area might eventually expand our knowledge concerning our diagnostic and therapeutic capabilities for this disorder.

Key words: challenges, panic disorder, anxiety disorders, lactate, hyperventilation, voluntary breath-holding, caffeine, carbon dioxide.


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