

Stress and limbic irritability in depression and alcohol dependency

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Abstract

Depressive disorders and alcohol dependency recently present epidemiologically most significant psychiatric disorders. According to current research both diseases are multifactorial, mainly represented by genetic and environmental conditions. Several recent research studies are mainly focused on social factors related to stress and traumatic events such as neglect, deprivation, verbal, emotional, physical and sexual abuse, bullying and others. Important feature of these pathological conditions present disbalance between excitatory and inhibitory systems. In this context in affective disorders as well as in alcohol dependency these inhibitory deficits are represented by increased sensitivity and excitability of the limbic system called limbic irritability. Several studies suggested that these pathological changes may be described using the kindling model that potentially may explain limbic changes similar to temporal lobe epilepsy which may produce affective, cognitive and psychosensory symptoms but without typical changes that occur in neurologically diagnosed epilepsy. Following these findings significant correlations between depression and limbic irritability and between limbic irritability and alcohol craving have been found. Other significant result reported in this study is significant correlation between limbic irritability and dissociation, which is also related to limbic changes related to stress and trauma producing deficits in memory consolidation and inhibitory systems that lead to mental disintegration. Results of this study show that dissociation in depressive patients is significantly related to limbic irritability and severity of depressive symptoms. Other research findings reported in this study have shown that limbic irritability in alcohol dependent patients is closely related to transinformation between the left and right side of electrodermal records. This relationship likely may be interpreted as a consequence of increased information transfer between left and right hemisphere caused by sensitization, inhibitory deficits and epileptiform changes

related to limbic irritability. Further research in this field may help to find other intriguing connections related to stress, limbic irritability and other psychopathological symptoms that could enable to improve diagnostics and therapy, and also increase current knowledge of basic mechanisms participating in development of depression and alcohol dependency.