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Oral Presentation

Functional Characterization of Human GABA_A Autoantibodies in the Context of Limbic Encephalitis

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Abstract

Limbic encephalitis is an adaptive autoimmune disease, induced by different autoantibodies, which target extracellular neuronal epitopes, such as NMDA or GABAB receptors. Consequences of autoimmune inflammation of the amygdala are largely unknown. The amygdala is central for the generation of adequate homeostatic behavioral responses to emotionally significant external stimuli following processing in a variety of parallel neuronal circuits. Here, we hypothesize that adaptive cellular and humoral autoimmunity may target and modulate distinct inhibitory or excitatory neuronal networks within the amygdala, and thereby strongly impact processing of emotional stimuli and corresponding behavioral responses. This may explain some of the rather poorly understood neuropsychiatric symptoms in limbic encephalitis.

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Keywords: Limbic, Autoimmune Disease, Especially

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