Poster Presentation

Neuroanatomical Basis of Anxiety Disorders

Maryam Borhani-Haghighi[1, 2*], Fatemeh Alipour[1]

[1]Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran
[2]Department of Anatomy, Tehran University of Medical Sciences, Tehran, Iran

Abstract

Anxiety is an emotion characterized by an unpleasant manner of inner distress, often accompanied by nervous behavior. Anxiety is related to the particular behaviors of fight or flight responses. The amygdala, the insula and anterior cingulate cortex seem to be critical, and all three have been referred to as the fear network .The amygdala which plays a fundamental role in neural network of fear and anxiety. The amygdala is comprised of at least 13 different subnuclei, the central, the basal and lateral nuclei. The central nucleus regulates many aspects of the fear response such as regulation of the release of cortisol through the paraventricular nucleus of the hypothalamus, increase in fear response via the midbrain, and modulation of the autonomic nervous system through the lateral hypothalamus. Conclusion: Neuroimaging methods can be used to examine functional brain differences between healthy individuals and those with anxiety disorders and also these findings can help to find a treatment for anxiety disorders.

Keywords: Anxiety, Amygdala, Neuroanatomy

Corresponding Author: Maryam Borhani-Haghighi

E-mail: *borhanihm@gmail.com*