Neuroimaging in Anxiety Disorders

Saleh Salehi Zahabi\(^1\), Farkhonde Salehi\(^2\), Farzad Moradi\(^3\), Shahriar Asgari\(^3\)

\(^1\)Medical Imaging Physicist, Radiology and Nuclear Medicine Department, Kermanshah University of Medical Science, Kermanshah, Iran
\(^2\)Department of Clinical Psychology, Kermanshah University of Medical Science, Kermanshah, Iran
\(^3\)Department of Radiology, Kermanshah University of Medical Science, Tehran, Iran

Abstract

In recent years, the development of neuroimaging techniques such as high-resolution magnetic resonance imaging (MRI), functional magnetic resonance imaging (fMRI), positron emission tomography (PET), or single photon emission tomography (SPECT) has promoted the identification of structural and functional characteristics underlying mental disorders to a great extent. In anxiety disorders, recent neuroimaging techniques have contributed greatly to diagnosis and treatment, and helped to shed light on the neurobiological basis of anxiety in general. Functional imaging procedures and radioligand binding studies in healthy subjects and in patients with anxiety disorders provide growing evidence of the existence of a complex anxiety network, including limbic, brainstem, temporal, and prefrontal cortical regions. Neuroimaging techniques could support the diagnostic process of anxiety disorders and support the inevitable rationale of implying biological variables in the classification of anxiety disorders. So in the present article we have provided an overview of the application of current neuroimaging in anxiety disorders.

Keywords: Anxiety, Neuroimaging, MRI, PET

*Corresponding Author: Saleh Salehi Zahabi
  E-mail: sazahabi@gmail.com