

عنوان مقاله:

Inferior Frontal-Occipital Fasciculus (IFOF) is the Main Neural Pathway in Psychotic Symptoms Induced by Methamphetamine Abuse: A Tract-based Spatial Statistics Study

محل انتشار:

مجله بین المللی مطالعات سلامت, دوره 8, شماره 4 (سال: 1401)

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خلاصه مقاله:

Background: Chronic methamphetamine abuse can lead to white matter changes and increased levels of psychotic symptoms. This study aimed to investigate which neural pathway is most associated with the psychological symptoms of chronic Methamphetamine abuse. Methods: We recruited ۲۲ chronic methamphetamine abuse subjects meeting DSM-۵ criteria and ۲۱ healthy controls. Psychotic signs were measured using the positive and negative syndrome scale (PANSS). We applied tract-based spatial statistics (TBSS) to investigate group differences in alteration DTI parameters and their association with psychotic symptoms. Results: Chronic methamphetamine abuse group had significantly lower FA and higher AD, RD, and MD in a wide range of white matter mainly IFOF, and subjects in the methamphetamine abuse group had significantly higher PANSS total scores when compared to the control group. Conclusions: Chronic methamphetamine abuse shows subtle patterns of impaired white matter integrity of distinct cerebral nerve pathways, mainly IFOF relative to controls. The results are further suggested that neuronal tract-based pathology plays the main role in psychotic symptoms in methamphetamine abuse disorders. Keywords: Methamphetamine, psychotic symptoms, Tract-Based Spatial Statistics (TBSS), Inferior Frontal-Occipital Fasciculus (IFOF). Background: Chronic methamphetamine abuse can lead to white matter changes and increased levels of psychotic symptoms. This study aimed to investigate which neural pathway is most associated with the psychological

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کلمات کلیدی:

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