Result of Alcohol Excessive Drinking in the Brain and Varying Mental Health Side Effects

Dorsa Zeraati*, Fateme Alipour, Samin Parvane Hosseini

Islamic Azad University, Mashhad Branch, Member of Mashhad Neuroscience Research Group of Islamic Azad University, Mashhad Branch, Mashhad, Iran

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Abstract

Alcohol directly affects astroglial cell function, including inflammation-related activity. And it also affects microglial cell development and function in specific ways that interfere with microglial interactions with the immune system and with neurons. Neuroinflammatory processes might be involved in alcohol-induced brain damage. Alcohol use, misuse and getting used to it causes different kind of mental disorders. Alcohol can cause dementia and it can speed up the rate of neurodegeneration or may contribute at various mechanistic points in the genesis and sustenance of Alzheimer Disease pathology via neuroinflammation. Children prenatally exposed to alcohol can suffer from serious cognitive deficits and behavioural problems as well as from alcohol-related changes in brain structure. Children with fetal alcohol syndrome (FAS) exhibit problem behaviours, such as alcohol and drug use, hyperactivity, impulsivity and poor socialization and communication skills. Frontal lobes are the most damaged region of the brains of alcohol abusers but other regions of the brain are also affected. When the rate of blood alcohol goes up brain damage causes impairments in judgement and decision-making and social skills. These brain changes explain the poor behavioural control and impulsivity, which tend to worsen the existing addiction problem.

Keywords: Neuroinflammation, Brain, Alcohol, Fetal alcohol syndrome

*Corresponding Author: Dorsa Zeraati

Email: dorsa.z@yahoo.com