

High Serum Tryptophan Associated with Evidence for Diminished Central Serotonin Function in Abstinent Alcoholics

1. CONOR K. FARREN¹,
2. TIMOTHY G. DINAN²

Author Information

1. ¹

Yale University School of Medicine, Department of Psychiatry, Substance Abuse Treatment Unit, 1 Long Wharf, New Haven, CT 06511, USA

2. ²

St. Bartholomew's Hospital, Department of Psychological Medicine, West Smithfield, London EC1A 7BE, U.K.

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Abstract

We measured the serum tryptophan in a group of abstinent alcoholics and healthy controls and compared the findings with the results of a d-fenfluramine prolactin challenge in the same group of alcoholics and matched controls. The prolactin response to d-fenfluramine was diminished in the alcoholics, while the serum tryptophan was elevated. When the alcoholics were divided into high tryptophan and low tryptophan groups by the mean alcoholic tryptophan, the high tryptophan alcoholics had a diminished prolactin response to d-fenfluramine while the low tryptophan alcoholics did not. These findings suggest the possibility of one or more serotonergic abnormalities in abstinent alcoholics.