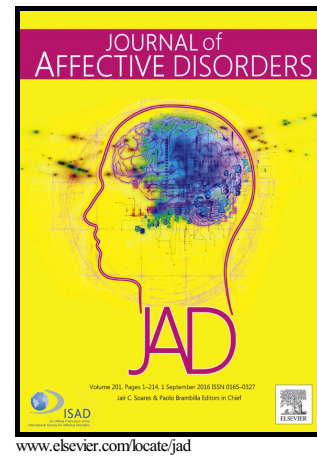


# Author's Accepted Manuscript

## CSF Apolipoprotein E in attempted suicide

Peter Asellus, Peter Nordström, Anna-Lena Nordström, Jussi Jokinen



PII: S0165-0327(17)30202-1  
DOI: <http://dx.doi.org/10.1016/j.jad.2017.08.019>  
Reference: JAD9138

To appear in: *Journal of Affective Disorders*

Received date: 26 January 2017  
Revised date: 31 May 2017  
Accepted date: 10 August 2017

Cite this article as: Peter Asellus, Peter Nordström, Anna-Lena Nordström and Jussi Jokinen, CSF Apolipoprotein E in attempted suicide, *Journal of Affective Disorders*, <http://dx.doi.org/10.1016/j.jad.2017.08.019>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# CSF Apolipoprotein E in attempted suicide

Peter Asellus<sup>a\*</sup>, Peter Nordström<sup>b</sup>, Anna-Lena Nordström<sup>b</sup>, Jussi Jokinen<sup>a,b</sup>

<sup>a</sup> Department of Clinical Sciences, Umeå University, Umeå, Sweden

<sup>b</sup> Department of Clinical Neuroscience, Karolinska Institutet, R5, Karolinska University Hospital/Solna, SE-171 76 Stockholm, Sweden

\*Corresponding author. Peter Asellus, M.D., Ph.D. Department of Clinical Science/Psychiatry/Umeå University/Sweden. Tel +4690785000. e-mail adress: peter.asellus@umu.se

## Abstract

### Background:

Cholesterol and cholesterol metabolism, involved in continued neural plasticity, has been associated to suicide and suicidal behavior. Apolipoprotein E (ApoE) plays an important role in the cholesterol metabolism. The purpose of this study was to investigate whether ApoE in cerebrospinal fluid was related to severity of suicidal behavior as measured by number of earlier suicide attempts, reversibility/interruptability and violent method of suicide attempt.

### Methods:

CSF ApoE and 5-hydroxyindolacetic acid (5-HIAA) were measured in 42 medication free suicide attempters. Earlier suicide attempts and the reversibility of suicide attempt method were assessed with the Suicide Intent Scale (SIS) and the Freeman Scale. Suicide attempts were classified according to violence of method.

### Results:

CSF ApoE levels significantly negatively correlated to the scores on Freeman Reversibility and there was a trend for lower CSF ApoE levels in suicide attempters using a violent method. Patients with at least one earlier suicide attempt (repeaters) showed a trend for higher CSF ApoE levels compared to suicide attempters debuting with suicidal behavior at inclusion in the study. The correlation between CSF ApoE and 5-HIAA was not significant.

### Limitations:

The main limitations to this study were a relatively small sample size and lack of a healthy control group.

### Conclusion:

Irreversible suicide attempts, representing a high risk for completed suicide, may be associated with lower level of ApoE in CSF.

Keywords: suicide attempt, apolipoprotein E, violence, cholesterol, stress

Download English Version:

<https://daneshyari.com/en/article/5721715>

Download Persian Version:

<https://daneshyari.com/article/5721715>

[Daneshyari.com](https://daneshyari.com)