

Study of Post-Mortem CSF 5-Hydroxyindoleacetic Acid (5-HIAA) Level and It's

The study was conducted By **Dr Divya Bhushan** in the department of **Forensic Medicine and Toxicology, All India Institute of Medical Sciences, Bhopal** on a total of 71 cases (35 suicidal cases and 36 Non-suicidal cases for control) brought to the mortuary for medico-legal autopsy. After gathering the necessary information from the accompanying investigating officer and the families, the socio-demographic profile of suicide victims was examined.

Psychological autopsy was recorded on a Performa as described in the protocol after obtaining a formal consent from relatives in writing to provide the required information for the above mentioned study. The Performa also included the details regarding brief history of the incidence, personal history, any precipitating factor, and family history.

During autopsy CSF sample was collected and CSF 5-HIAA was analysed by using HPLC at Department of Biological Sciences, Indian Institute of Science Education and Research (IISER) Bhopal.

Majority of the victims of suicide were males and the most common age group was 19-30 years. Most of them were manual labor, married, belong to middle class socioeconomic status, and most common method adopted to commit suicide was 'Hanging'. Majority of victims preferred home to commit suicide did so during the afternoon hours. The most common precipitating factor was depression related symptoms and suicidal behaviour. Majority of male suicide victims were addicted to drugs.

Level of CSF 5-HIAA level found to be significantly less in suicidal cases and also in cases having prior suicidal behaviour. Using the CSF 5-HIAA we can say, suicide as a manner of death with 86% specificity and 54% sensitivity.

This study can be extrapolated in clinical settings and level of 5HIAA in CSF may be used to predict suicidal behavior and may be used to prevent suicide by timely intervention.

Dr. Divya Bhushan,
Senior Resident, Department of Forensic
Medicine and Toxicology
AIIMS, Bhopal