

## Serum Lipids and Suicidality in Early Psychosis: Is there a connection; a preliminary study

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*Introduction:* Suicide is the commonest cause for mortality (12%) in Schizophrenia; however these patients can not be identified. (1). lower level of cholesterol is associated with suicide behavior., violent suicide, postmortem brain of suicide completers, as well as in psychosis, Cholesterol plays an important role in distinguishing suicidal from non-suicidal patients which can possibly be explained by a process involving different factors e.g. platelet phospholipids ,abnormal erythrocyte membrane phospholipids including the time of treatment in schizophrenia. (2). It is reportedly one of the mediators in inter-relationship of mind and brain (3). Interestingly it has also been implicated mechanism and psychosis and side effects of antipsychotics. The relationship of Suicidality, psychosis and cholesterol remains undetermined and complex. The present study examines levels of cholesterol in a cohort of early psychosis with low and high suicidality to explore the possible biological connection and its clinical implications

*Method:* Sixty admitted patients with a DSM-IV diagnosis of early psychosis (schizophrenia) were assessed in a naturalistic cross-sectional, cohort study for mild and severe suicidality by using the locally developed scale for assessment of suicidality (SIS-MAP). Psychopathology was assessed with the PANSS and HDRS. Levels of cholesterol from clinical data base were compared between the groups showing low suicidality and high Suicidality.

*Results:* Out of 60 patients, 32-showed severe suicidality and 28-showed low suicidality. Serum cholesterol showed no abnormality (5.6 mmol/Lit NS) in the cohort of early psychosis patients. Patients with low-suicidality (SIS-MAP <10) also did not show any abnormality in levels of cholesterol (5.04 mmol/Lit, NS). Low levels of cholesterol were observed in a subgroup with severe suicidality (SIS-MAP >30; 4.07 mmol/Lit,  $p < 0.3$ ) and severe depression (HDRS >20, 4.2 mmol/Lit  $p < 0.03$ ).

*Conclusion:* The study shows that serum cholesterol does not show any abnormality in early psychosis admitted patients as a group. However, lower levels are observed in patients of psychosis with severe suicidality and severe depression. The finding raises some undetermined aspect of correlations among cholesterol, depression in psychosis, and severity of suicidality. More research is required in this field to determine the neurochemistry of suicide behavior in psychosis. Future studies are

controlled and longitudinal studies are required which are providing significant information for prediction of suicide in schizophrenia.

References;

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