STUDENTS' CORNER
LETTER TO THE EDITOR

Type 1 Diabetes mellitus and psychiatric disorders: A deep insight and call for awareness

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Respected Madam, Diabetes is one of the most prevalent endocrine disorders running in our society. Type 1 diabetes mellitus (T1DM) is usually diagnosed in the early years of life. In contrast, type 2 diabetes mellitus (T2DM) prevalence is seen in later years due to decreased body's capacity towards glucose metabolism. Pathogenesis involved in type 1 diabetes mellitus is autoimmune- based as compared to type 2 diabetes mellitus, a metabolic disorder.[1]

Type 1 Diabetes mellitus is a hereditary disorder, 10-15% of people having first or second- degree relatives. The dominant gene recognized in T1DM is human leukocyte antigen (HLA). HLA, a region of MHC (major histocompatibility) protein, is located on chromosome 6. HLA class molecules DR4, DR2 and DR8, are most commonly found in T1DM patients.[2]

Diagnosis of type 1 Diabetes mellitus is gruesome for individuals because of the destruction of beta cells (insulin-producing cells), continuous adherence to insulin and strict dietary regulation making them more prone to psychiatric disorders. This conclusion is made on the basis of different studies including meta-analysis and systematic review indicating relation between psychiatric disorders in T1DM patients as compared to the general population. According to studies, the association of Hb1Ac with psychomotor disorders has been established.[3] Poor glycaemic control significantly increased the risk of suffering from psychological disorders. These disorders are common in those who manipulate insulin therapy either by overdosing or under-dosing. High incidences of Depression, specific phobia, social phobia and eating disorders were found among patients with insulin. Females (37.7%) were found to be more prone to psychiatric disorders than males (18.7).[4] These psychological disorders are etiologically associated with reduced quality years of life, poor treatment adherence, less glycaemic control and recurrent visits in ER. Furthermore, the increased association of Alzheimer disease has also been found. Quantitative meta-analysis and longitudinal studies have identified a high risk of Alzheimer disease and vascular dementia among diabetic patients.[5] Interestingly, the incidence of schizophrenia has been found less among T1DM patients.[6]

Every patient should be encouraged towards optimistic behaviour of adopting a healthy lifestyle. People with a history of manic and depressive episodes, mood swings and anxiety should get special care. Diabetes education programmes and free encouraging self-care should be held on national and international level to help such individuals overcome stress and anxiety and delayed complications of T1DM. Furthermore, long-term studies are required to evaluate the relation between T1DM and schizophrenia.

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