MODY (Maturity onset diabetes of the young)

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Madam, diabetes mellitus affects approximately 2.8% of the world's population, of which type 2 diabetes accounts for atleast 90% of the cases.[1] MODY or maturity onset diabetes of the young is caused by mutation in autosomal dominant genes with early onset of hyperglycaemia and deficiency of insulin secretion.[2] It differs from both type 1 and type 2 diabetes and is very rare in comparison to these two.

MODY is said to be the most frequent cause of diabetes in children after type 1 diabetes.[3] It occurs because of mutations in different genes. The most common forms of MODY are MODY 3 (mutation in Hepatocyte Nuclear Factor 1 Alpha gene (HNF1A) and MODY 2 (mutation in Glucotinase gene [GCK]).

Its main features include: the diagnosis of diabetes before 25 years of age; having a parent with diabetes, or diabetes in two or more generations; and the use of insulin is not necessarily needed. Hyperglycaemia in MODY develops in childhood, adolescence or early adulthood and is mainly due to defective insulin secretion.[4]

The symptoms of MODY are similar to other forms of diabetes but differs on two aspects - the lack of diabetic antibodies distinguishes it from type 1 diabetes, while the absence of insulin resistance in obese people differentiates from type 2.[5] For its diagnosis, knowledge about the patient's family history as required along with the suspicion of the disease.[3]

A study conducted shows that the use of urine C-peptide creatinine ratio could be helpful in indentifying diabetes mellitus 2 and MODY in paediatric population.[6]

The main goal of its treatment is to maintain a good glycaemic control. The management of MODY is similar to the normal management of diabetes which include: change in dietary habits, regular exercising, oral hypoglycaemic drugs and insulin.

MODY is an upcoming issue in European countries[6] and the US while studies about it still have not been conducted in Pakistan.

The lack of awareness about this unknown type of diabetes should be addressed and knowledge about the disease, its prevalence and awareness about it must be raised among the general public so that it could be diagnosed and treated early before it becomes a serious threat to the human population.

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