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Frequently misdiagnosed condition can be identified earlier by looking at phenotypic features

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Diabetes is no doubt a global epidemic [1]. In the subcontinent, Pakistan is among the top ten nations when it comes to the prevalence of diabetes [2].In addition, this lifelong disease does not come alone but at the cost of microvascular and macrovascular complications, compromising the quality of life.

It not only affects the quality of life of the individual suffering from diabetes, but the family also go through a psychological burden in coping with behavioural change. Early diagnosis and treatment of diabetes will help reduce the burden of complications and will be cost-effective for both the patient and the health sector.

It is evident from the literature that a passive lifestyle, coupled with overeating and interactions with various environmental factors, predisposes to an increased risk for metabolic syndrome and associated cardiometabolic complications. Type 2 diabetes is a lifestyle-related type, and we know that oral medication and lifestyle interventions are the cornerstones of treatment. While in type 1 diabetes, there is a complete lack of insulin. In addition, other types require extra vigilance from the general physicians so that the right treatment choice can be initiated without delay.

Latent Autoimmune Diabetes of Adults (LADA) is one of the types of diabetes that is extremely challenging to diagnose [3], and that too in the resources constraint subcontinent. In addition, the majority of LADA patients initially respond to oral antidiabetic drugs owing to the gradual progressive destruction of beta cells in contrast to type 1 diabetes. Therefore, the majority of these patients are initially mistakenly labelled as type 2 diabetics.

As previously mentioned, beta cells are slowly destroyed, and the ultimate fate of LADA patients is quite similar to type 1. That is, they reach a point when they no longer respond to oral antidiabetic drugs. This is the time when the only solution for these patients is the initiation of insulin. It is important for the patient that there should not be any delay in the transition from oral antidiabetic to insulin.

Early identification of the disease requires regular patient follow-up and awareness of the phenotypic features of LADA among Physicians. Since LADA remains undiagnosed or there is a delay in identifying these patients, a clinician should be vigilant if he comes across a thin, lean patient with a history of weight loss in the age group of 30 to 45 who has responded to oral medication in the initial years of diagnosis and that time period can vary from 2 to 5 years. More rapid destruction of pancreatic beta cells is noted in these patients who have been prescribed sulphonylurea. So, as a rule of thumb, if a patient has the above-mentioned phenotypic features, the clinician should choose oral medication excluding sulphonylurea to preserve beta cell function a bit longer [4].

In addition, these patients should be asked to come for regular follow-up at least twice a year. In case they don't respond to oral medication, don't relate that to poor drug compliance or non-adherence to the advised dietary regimen. Instead, go ahead with antibody testing, glutamic acid decarboxylase autoantibodies (anti-GAD) [4]. Since this test is quite expensive in our set-up, therefore regular follow-up coupled with the identification of phenotypic features of LADA and patients' poor response to oral antidiabetic will make up an LADA patient early identification triangle that needs to be implemented in the primary health care system [5].

Early insulin initiation once patients respond poorly to tablets without adding other oral adjuncts will definitely reduce the risk of hyperglycemia-related microvascular and macrovascular complications. In addition, it will improve the quality of life of these patients and will definitely be cost-effective both for the patient and for the health system.

In conclusion, the key to reducing the risk of complications and improving glycemic control in LADA patients is to identify the transition period of beta cell dysfunction earlier by employing the above-mentioned triangle, followed by insulin-mediated better glycemic control.

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