### **Diabetology and Vascular Disease Research**

## **Diabetes: A Changing Face**

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#### **Case Presentation**

It is time to adopt a more complex understanding of what it means to be "diabetic" and how to treat patients with the condition. This is not a critique of, to be clear either the most recent ideology or those from the past. In reality, this is a reminder that knowledge, time, and understanding advance, and we shouldn't be too sluggish to acknowledge this.

To put it another way, rather than thinking of diabetes classifications as set in stone, let's acknowledge the wide range and overlap of "typical traits" that exist throughout the present DM classifications [1].

For instance, about 30% of people with Type 1 diabetes mellitus (T1DM) have insulin resistance, whereas people with Type 2 diabetes mellitus (T2DM) are more likely to have T-cell mediated autoimmunity, with reports of cellular and humoral islet autoimmunity in 41% and 14%, respectively, of people with T2DM taking metformin in the National Institute of Diabetes and Digestive and Kidney diseases GRADE (Glycemia Reduction Furthermore, it's critical to understand that our capacity for early detection of consequences is constrained and that damage and disease-related processes start early [4]. Furthermore, it's critical to expand beyond "simply metabolic" processes in our understanding of the aetiology of diabetes and associated consequences [5,6].

In fact, the pathologic factors that harm the b-cell include genetic and epigenetic factors, inflammation, an abnormal environment, and insulin resistance. These factors not only exacerbate diabetes-related complications but also have links to other common diseases like cancer, dementia, psoriasis, atherosclerosis, nonalcoholic fatty liver disease, and nonalcoholic steatohepatitis.

Having said that, this creates the possibility for us to start thinking differently about how we manage our patients. We should feel encouraged to approach managing DM with multimodal techniques rather than feeling trapped in the mud with single pill therapy. Consider the money lost attempting to decide which medication was "better"

when we should be thinking about medications with complementary advantages and modes of action that address the complex aetiology of the DM spectrum [6]. Additionally, some more recent treatment classes have demonstrated advantages for treating hyperglycemia as well as lowering kidney and cardiovascular risk as well as encouraging weight loss [6]. Additionally, by shifting our perspective on a patient who is "unlucky enough" to have more than one disease in addition to diabetes mellitus (DM), we can better comprehend the connections between related illnesses, expanding our arsenal of potential medications to treat shared pathologies [6]. Precision medicine for our patients is more accessible because to this larger perspective.

Importantly, in order to advance individualised patient care safety, as advocated by Dr. Sniderman of the McGill University Health Centre, doctors must continue to respect clinical reasoning and logic in addition to evidence-based medicine [7].

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