# Diabetic Medications and their Lesser-Known Side Effects

## Introduction

Diabetes is a chronic metabolic disorder that affects millions of people worldwide. Managing diabetes often involves a combination of lifestyle changes, including diet and exercise, and medication. While diabetic medications are essential for controlling blood sugar levels, they may come with a range of side effects that patients and healthcare providers need to be aware of. Most individuals are familiar with the common side effects like weight gain or low blood sugar, but there are lesser known side effects that deserve our attention. In this article, we will delve into these less discussed side effects of diabetic medications to provide a comprehensive understanding of the potential risks and benefits.

## **Description**

## Metformin and gastrointestinal disturbances

Metformin is one of the most commonly prescribed medications for type 2 diabetes. It is known for its effectiveness in lowering blood sugar levels and improving insulin sensitivity. However, what is often overlooked are the gastrointestinal side effects associated with metformin, such as diarrhea, nausea, and abdominal discomfort. Some individuals may also experience a metallic taste in their mouths. These side effects can be so bothersome that patients may discontinue their medication, potentially leading to uncontrolled diabetes.

## Sulfonylureas and hypoglycemia

Sulfonylureas, another class of diabetes medications, work by stimulating the pancreas to release more insulin. While they are effective at reducing blood sugar, they have a well-known side effect-hypoglycemia, or low blood sugar. This side effect can cause symptoms like shakiness, sweating, confusion, and, in severe cases, loss of consciousness. Patients taking sulfonylureas need to be cautious about their diet and physical activity to avoid dangerous drops in blood sugar levels.

#### Thiazolidinediones and edema

Thiazolidinediones, often referred to as glitazones, are medications that help the body use insulin more effectively. While they are useful for managing diabetes, they have a lesser-known side effect: Edema. Edema is the buildup of excess fluid in the body's tissues, leading to swelling, particularly in the legs and ankles. This side effect can be uncomfortable and, in some cases, may lead to heart problems. Patients taking thiazolidinediones should be monitored for signs of edema, especially if they have a history of heart disease.

## Alpha-glucosidase inhibitors and gastrointestinal woes

Alpha-glucosidase inhibitors slow down the absorption of carbohydrates in the digestive tract, helping to control blood sugar levels after meals. However, they are notorious for causing flatulence, diarrhea, and abdominal pain, making them less popular among patients. These gastrointestinal side effects can be a significant barrier to medication compliance.

### DPP-4 inhibitors and pancreatitis

#### **Andrew Farmer**\*

Department of Endocrinology, Aristotle University of Thessaloniki, Thessaloniki, Greece

\*Author for correspondence: amew.faeerrr@phc.ox.ac.uk

Received: 05-Sep-2023, Manuscript No. JDMC-23-119069; Editor assigned: 08-Sep-2023, PreQC No. JDMC-23-119069 (PQ); Reviewed: 22-Sep-2023, QC No. JDMC-23-119069; Revised: 04-Oct-2023, Manuscript No. JDMC-23-119069 (R); Published: 13-Oct-2023, DOI: 10.37532/JDMC.2023.6(5).125-126 Dipeptidyl Peptidase-4 (DPP-4) inhibitors are a newer class of medications that work by increasing the levels of a hormone called incretin, which helps regulate blood sugar. While they are generally well-tolerated, some patients may experience pancreatitis, an inflammation of the pancreas. Pancreatitis can cause severe abdominal pain, nausea, and vomiting. Although this side effect is relatively rare, it is essential for patients and healthcare providers to be aware of the possibility.

## SGLT-2 inhibitors and genital infections

Sodium-Glucose co-Transporter 2 (SGLT-2) inhibitors are a class of medications that lower blood sugar by promoting the excretion of excess glucose through urine. One lesser-known side effect associated with SGLT-2 inhibitors is an increased risk of genital infections, particularly in women. Patients taking these medications should be advised to maintain good hygiene and seek prompt medical attention if they develop symptoms such as itching, redness, or pain in the genital area.

# GLP-1 receptor agonists and gastrointestinal upsets

Glucagon-Like Peptide-1 (GLP-1) receptor agonists are injectable medications that help control blood sugar by stimulating insulin release and reducing appetite. While they are generally well-tolerated, some patients may experience gastrointestinal side effects, including nausea, vomiting, and diarrhea. These symptoms are more common when starting the medication and tend to improve over time. However, they can be bothersome for some individuals.

#### Insulin and weight gain

Insulin is a hormone that regulates blood sugar levels, and for many people with diabetes, it's an essential part of their treatment plan. However, a well-known side effect of insulin is weight gain. Insulin promotes the storage of excess calories as

fat, which can lead to gradual weight gain over time. This weight gain can be frustrating for individuals who are already concerned about their weight or those with type 2 diabetes trying to lose weight.

## Corticosteroids and blood sugar spikes

Corticosteroids, often used to treat inflammation and various medical conditions, can lead to significant blood sugar spikes. These drugs can interfere with the body's ability to use insulin effectively, resulting in elevated blood sugar levels. For individuals with diabetes, managing their condition while taking corticosteroids can be challenging, and adjustments to their diabetes medications may be necessary.

#### Statins and diabetes risk

Statins are commonly prescribed to lower cholesterol levels and reduce the risk of heart disease. However, recent research has suggested a potential link between statin use and an increased risk of developing diabetes. While the risk is relatively low, it's essential for individuals taking statins to discuss the potential benefits and risks with their healthcare providers, especially if they have other risk factors for diabetes.

## **Conclusion**

Diabetic medications are crucial tools in managing blood sugar levels and preventing diabetes-related complications. However, it's essential for patients and healthcare providers to be aware of both the common and lesser known side effects associated with these medications. Understanding the potential risks and benefits of different diabetes drugs allows for more informed treatment decisions and better management of the condition. Ultimately, the key to successful diabetes management is open communication between patients and healthcare providers, enabling them to work together to find the most suitable treatment plan while minimizing the impact of any side effects.