The patient’s hemoglobin A1c is elevated, above 6.5%, which is indicative of Diabetes mellitus type 2. Rosenthal and Burchum (2021) mentioned that some may have conditions that result in alteration of hemoglobin levels which renders the A1c levels of patients inaccurate, such as chronic kidney or liver disease, pregnancy, recent severe bleeding or blood transfusion, certain blood disorders, including thalassemia, iron deficiency anemia, and anemia related to vitamin B12 deficiency. The authors emphasized other tests that may be used for diagnosing diabetes such as determining excessive plasma glucose through fasting plasma glucose test and an oral glucose tolerance test, or any combination of two tests on two separate days. A Fasting blood sugar determination should be done for the patient to decide on the appropriate medical therapy.

It is recommended by Rosenthal and Burchum (2021) that an A1c of 10% or higher and a fasting blood sugar of 300 mg or more, should be started on combination injectable treatment right away. Insulin therapy is beneficial for this patient as well as starting her on metformin (Glucophage). However, a renal function test must be determined as metabolic acidosis can occur in patients with renal impairment (Rosenthal & Burchum, 2021). According to Karla et al. (2019), metformin is advantageous in both T2DM (diabetes type 2) and thyroid disease compared to other diabetic medications.

There is a strong connection between T2DM and hypothyroidism, which prompts for a thyroid panel determination in all patients with T2DM (Tamez-Péreza et al., 2012). This is important to acquire baseline information for future reference. The patient can be started on levothyroxine (Synthroid) for her hypothyroidism. It is a synthetic preparation of thyroxine and is the drug of choice for patients requiring thyroid hormone replacement (Rosenthal & Burchum, 2021).

Peleg et al. (2006) discussed skin infections as common in diabetes, wherein Staphylococcus aureus is the most notable isolated pathogen in cellulitis among diabetics. Poor glycemic control is a predisposing factor. The first line antimicrobial treatment is Nafcillin/flu/dicloxacillin 1-2g/ iv 4-6hrs, with alternative as cephazolin 1g iv every 8hrs or clindamycin 600mg iv 8 hourly or 300 – 450mg PO 8 hourly or vancomycin 1 g iv 12 hourly.

Campbell (2012) stated that gastroesophageal reflux disease (GERD) is a chronic condition and common among type 2 diabetics due to its association with obesity, and from neuropathy or nerve damage, where gastroparesis a type of nerve damage can contribute to GERD. Furthermore, an upper gastrointestinal series, in which x-rays of the esophagus, stomach, and part of the intestines are obtained, and endoscopy to determine the presence of damage from acid reflux. A promotility drug will benefit the patient such as metoclopramide (Reglan) which increases the emptying rate of the stomach, reducing the chance of reflux.

I will be cautious in starting the patient on H2 receptor blockers or proton pump inhibitors as she will be on levothyroxine, and these medications decrease the absorption of the said drug. With Levothyroxine use, proper and adequate glucose monitoring should be observed by the patient since this medication will increase insulin dosage requirements prompting the need for insulin dosage adjustments (Rosenthal & Burchum, 2021). Lifestyle modification through diet and physical activity, along with drug therapy is recommended for the management of diabetes.

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