Medication-Induced Hyperglycemia and Diabetes

Post-test Questions for Recorded Version of Schwarting Symposium Webinar 5/2021

**1. Which of the following is the MAIN mechanism of glucocorticoid-induced hyperglycemia?**

1. Appetite suppression
2. Increased insulin resistance
3. Increased insulin sensitivity

**2. AA is a 60-year-old male who has just been prescribed prednisone 10 mg every morning for rheumatoid arthritis. He also has type 2 diabetes that was diagnosed last year and has been taking metformin since diagnosis. Recognizing that glucocorticoids can lead to drug-induced hyperglycemia, the prescriber ask for your recommendation regarding monitoring of the patient’s blood glucose. When should AA perform finger sticks to detect any blood glucose elevation due to the prednisone prescription?**

1. Obtain a fasting fingerstick daily
2. Obtain a bedtime fingerstick daily
3. Obtain a pre-dinner fingerstick daily

**3. Why is insulin therapy often a better option in the management of glucocorticoid-induced hyperglycemia compared to oral diabetes treatments such as metformin or GLP-1 receptor agonists?**

1. Insulin has a faster onset of glucose-lowering effect
2. Insulin is less expensive than oral medications
3. Insulin is easier to self-administer by patients than oral medications

4. Which of the following is a guideline recommendation for monitoring of hyperglycemia and diabetes caused by second-generation antipsychotics?

1. Obtain a family history of diabetes at baseline, at 12 weeks after start of therapy, and at least once a year thereafter
2. Obtain a fasting blood glucose at baseline, at 12 weeks after start of therapy, and at least once a year thereafter
3. Measure weight at baseline, at 12 weeks after start of therapy, and at least once a year thereafter

**5. What did the JUPITER RCT find when the researchers analyzed the risk of diabetes in the rosuvastatin 20 mg group compared to the placebo group?**

1. A relative risk of a 28% increase in diabetes but an absolute risk difference of only 0.3%
2. A relative risk of a 28% reduction in developing diabetes in the rosuvastatin arm compared to the placebo arm
3. There was no difference in the risk of developing diabetes with rosuvastatin compared to placebo

**6. Patients prescribed protease inhibitors may present with hyperglycemia. What additional clinical manifestation is also likely?**

1. Lipodystrophy
2. Weight gain
3. Hyperpigmentation of the skin

**7. EF is a 70-year-old male with a history of myocardial infarction 2 years ago, hypertension, dyslipidemia, and COPD. He reluctantly admits to not taking his atorvastatin for the last six months due to concern of developing diabetes – he read about this on a post on social media. Which of the following education points should you discuss with EF?**

1. Data from large randomized, controlled trials have shown that a very small increase in diabetes risk in patients without pre-existing diabetes but a large reduction in major cardiovascular events and cardiovascular death.
2. The risk of developing diabetes has only been shown with rosuvastatin, so he can ask his physician to prescribe one of the other statins instead.
3. The risk of developing diabetes has only been shown in postmenopausal women.

**8. Pentamidine can cause initial hypoglycemia followed by hyperglycemia via what mechanism?**

1. Destruction of pancreatic beta cells
2. Destruction of pancreatic alpha cells
3. Weight gain

**9. When drug-induced hyperglycemia occurs, what is a good management strategy?**

1. Discontinue medication or reduce the dose if possible
2. Increase the dose of the suspected medication
3. Recommend an exercise regimen in patients prescribed glucocorticoids

**10. Which of the following are symptoms of hyperglycemia and diabetes?**

1. Headaches and dizziness
2. Peripheral edema and shortness of breath
3. Polyuria, excessive thirst, and polydipsia