# **CR-D-43**

# A RARE CASE OF CONCURRENT DIABETIC KETOACIDOSIS AND THYROID STORM IN PREGNANCY

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## INTRODUCTION

Diabetes and thyroid disease are two closely associated disorders. Nevertheless, concurrent presence of diabetic ketoacidosis (DKA) and thyroid storm (TS) is rare, but life-threatening. In pregnancy, it may increase the risk of maternal and fetal complications.

#### **CASE**

Herein we present a 23-year-old pregnant woman in her 29 weeks of pregnancy who came to the emergency department with abdominal pain, nausea, and fever. Physical examination revealed tachycardia (>150 bpm), tachypnoea, and dehydration. Her initial laboratory work-up revealed high blood glucose, ketonemia, acidosis with high anion gap, and bacteriuria. Despite aggressive management for DKA, no apparent improvement was observed. Further examinations revealed hyperthyroxinemia and supressed TSH, which fulfilled the Burch Wartofsky score of 50 and TS 2 criteria according to Japan Thyroid Association diagnostic criteria for TS. She was then treated as thyroid storm and her clinical condition improved afterward.

#### **CONCLUSION**

The presence of persistent tachycardia despite DKA management lead us to the diagnosis of thyroid storm in this rare case of concurrent DKA and thyroid storm in pregnancy.

## **KEY WORDS**

diabetic ketoacidosis, thyroid storm, pregnancy, concurrent

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# CASE REPORT OF EARLY-DIABETES HYPOGLYCEMIA: LINK BETWEEN REACTIVE HYPOGLYCEMIA AND INSULIN RESISTANCE

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## INTRODUCTION

Hypoglycemia rarely occurs in patients not being treated for diabetes mellitus. To this end, further investigation needs to be done to find the underlying cause of hypoglycemia, thus, determining appropriate treatment.

#### **CASE**

A 62-year-old man (weight: 46 kg, BMI: 18.8 kg/m<sup>2</sup>) was referred for recurrent hypoglycemia within the last 4 months. There was no history of gastric bypass surgery nor consumption of hypoglycemic agent. Laboratory examination taken during a hypoglycemic episode (blood glucose of 40 mg/dL) revealed elevated serum insulin and C-peptide levels, which were 38.6 (NV 2.6-24.9) uU/ mL and 8.73 (NV 1.1-4.4) respectively. Neither abdominal ultrasound, endoscopic ultrasound, abdominal CT scan nor MRI revealed a mass in the pancreas or other organs in the abdomen. Following the given complex carbohydrates, the patient could finish extended oral glucose tolerance test (eGTT) and the result was 97 mg/dL. Following 1-2 hour administration of 75 g anhydrous glucose, patient' blood glucose levels were 244 and 203 mg/dl, respectively. Hypoglycemia occurred after 4 hours eGTT (48 mg/dL).

## **CONCLUSION**

Approach to hypoglycemia in patients not treated with diabetic medication is a challenging issue for clinicians. The first step is to confirm the presence of hypoglycemia. Second is to measure the serum levels of insulin and C-peptide during a hypoglycemic episode. However, reactive/functional hypoglycemia can be found in early diabetes mellitus. Extended/prolonged oral glucose tolerance test should be considered in a patient suspected to have reactive hypoglycemia.

# **KEY WORDS**

hypoglycemia, insulin resistance, early-diabetes mellitus