Title

Does exogenous steroid influence the diagnosis of starvation ketosis versus diabetic ketoacidosis?

Introduction: Diabetic ketoacidosis usually associated with high anion gap metabolic acidosis with ketonemia. However, one of differential high anion gap metabolic acidosis is starvation ketosis. Although starvation ketosis is rarely accounted, it’s usually masked by patient that receive endogenous steroid.

Case: We presented a case of 62 years old lady with underlying falx meningioma under neurosurgery follow up whom on tapering dose of steroid therapy. She was presented to emergency department with poor oral intake for three days and altered sensorium. Blood gas showed mild metabolic acidosis with ketonemia and high glucose. Sodium level was 127.Blood gas showed marked improvement and resolution of metabolic acidosis after she received 2litres of fluid boluses. She was treated as starvation ketosis despite no hypoglycemia episode in emergency department.

Discussion: Reduced oral intake and dehydration increased cellular level metabolic demand thus influences production of ketone which subsequently resulting in starvation ketosis and mild metabolic acidosis However, in patient who is taking exogenous steroid, diagnosis may be challenging.

Keywords: Starvation, Acidosis, Exogenous Steroid