Title

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

Introduction: Diabetic ketoacidosis usually associated with high anion gap metabolic acidosis with ketonemia or ketonuria. However, one of differential to be considered for high anion gap metabolic acidosis would be starvation ketosis. Although starvation ketosis rarely accounted, it is possible to be masked by patient that receive exogenous steroid.

Case: We presented a case of 62 years old lady with underlying falx meningioma under neurosurgery care on tapering dose of oral steroid. She presented to emergency department with days of poor oral intake and altered sensorium. Blood gas showed mild metabolic acidosis with ketonemia and high glucose. Blood gas showed rapid improvement and resolution of acidosis after she 2litres of fluid bolus. She was treated as starvation ketosis even though no hypoglycemic episodes in emergency department.

Discussion: Reduced oral intake and dehydration increases cellular level metabolic demand thus contributes to production of ketone bodies which subsequently results in starvation ketosis and mild metabolic acidosis. However, it can be a diagnostic dilemma in patient on exogenous steroid.

Keywords: Starvation, Acidosis, Exogenous Steroid