

**PP69 'I'M SUGAR HIGH, I CAN'T STOP DANCING' - A RARE CASE OF HYPEROSMOLAR HYPERGLYCEMIC STATE (HHS) PRESENTED WITH HEMIBALLISMUS HEMICHOREA**

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**INTRODUCTION**

Chorea is a non-rhythmic, non-suppressible involuntary jerky movement that occur due to overactivity of dopamine in area that control movement in brain. Hemiballismus is a severe form of chorea which characterized by involuntary and violent course of movement. Non-ketotic hyperglycemia such as hyperglycemic hyperosmolar state (HHS) can unusually manifest as hemiballismus hemichorea which can be challenging to recognize. However, this is usually reversible with glycemic control. Here we describe a case of an elderly lady which presented with hyperglycemic hemiballismus hemichorea.

**CASE PRESENTATION**

This is a case of 71-year-old lady who had underlying poorly controlled long standing Diabetes Mellitus (DM) on subcutaneous insulin therapy, presented to the Emergency Department (ED) with one day history of left sided upper limb and lower limb jerking movement. Patient was fully conscious during the episodes. Her plasma osmolality was 324 mOsm/kg with absence of ketoacidosis. Thus, initially treated as HHS to rule out intracranial bleed (ICB) where fluids and insulin was commenced in ED. In ward, her symptoms subsided with tight

capillary glucose control. However, the symptom recurs as hyperglycemia repeats. She was discharged well after hyperglycemia and her symptoms resolve.

**RESULT**

Laboratory evaluation shows high blood glucose (49.9 mmol/L) with pseudohyponatremia 131 mmol/L, acute kidney injury with creatinine of 213.16 µmol/L and urea 13.37 mmol/L. Non contrast Computed Tomography (CT) brain was done to rule out intracranial bleeding or cerebrovascular accident which shows bilateral basal ganglia small hypodensities and calcification. Repeated CT brain at 72 hours of admission showed no changes from initial presentation.

**DISCUSSION**

Patient was initially thought to have focal seizure or intracranial bleed however it did not explain that patient was fully conscious during the incident and repeated CT brain did not shows any bleeding.

**CONCLUSION**

Hyperglycemic hemiballismus hemichorea can easily be overlooked due to unfamiliarity. It is usually mistreated as other more common disease such as CVA, meningitis or seizure. Nonetheless this symptom has good prognosis and can easily resolved with early recognition and treatment to reduce glucose level. Thus, it is imperative for clinician to be vigilant about this syndrome