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### A RARE CASE OF HYPERGLYCAEMIA HEMICHOREA IN A NEWLY DIAGNOSED TYPE 1 DIABETES MELLITUS PATIENT

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#### INTRODUCTION/BACKGROUND

Hemichorea is an uncommon presentation of hyperglycaemia. Reported cases are usually among elderly women with poorly controlled Type 2 Diabetes Mellitus in the Asian population. The difficulty of management of such cases is often due to unfamiliarity hemichorea as an associated symptom of hyperglycaemia. We report the case of a 39-year-old female, who presented with left hemichorea associated with hyperglycaemia.

#### CASE

A 39-year-old female, with history of Grave's Disease, presented with 1-week history of hemichoreoform movement of the left upper limb and lower limb. Upon presentation, her vital signs were normal and Glasgow Coma Scale (GCS) was 15. Bedside capillary blood glucose (CBG) was 21.8 mmol/L and serum plasma ketone was 2.8mmol/L, however venous blood gas was normal. Computed tomography (CT) of the brain was done revealing unilateral right caudate nucleus and putamen calcification. This patient was managed with variable rate insulin infusion initially, and overlapped with basal bolus insulin when she was more stable. Her hemichoreoform movement did not improve despite normalization of the sugar levels. Clonazepam was added to control her symptoms but only yielded partial improvement. After 1-week of benzodiazepine treatment, haloperidol was added to further control the symptoms. She was discharged with insulin therapy and 2 months upon review in the outpatient clinic, her symptoms were well-controlled and she was able to ambulate independently. Even though phenotypically she appeared to have Type 2 Diabetes Mellitus, her diabetes autoantibodies (anti-islet cell and anti-glutamic acid decarboxylase) were strongly positive. Her HbA1c had improved from 17.0% to 6.8% within 3 months' time.

#### CONCLUSION

Hemichorea is a rare presentation of hyperglycaemia. However, it is important to recognize it, as prompt glycaemic control can alleviate the symptoms alongside with symptomatic control medications such as benzodiazepine and dopamine receptor antagonist.

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### ZAPPING THE ELUSIVE CULPRIT

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#### INTRODUCTION/BACKGROUND

Hypoglycaemia among patients without diabetes is uncommon and warrants further investigation especially when Whipple's triad is fulfilled. Endocrine causes of hypoglycaemia include cortisol deficiency and endogenous hyperinsulinemia. We report the case of a 69-year-old female whose insulinoma was unmasked after cessation of glucocorticoids and subsequent management.

#### CASE

Our patient is a 69-year-old Malay female who has long standing pemphigus vulgaris (PV) since 1994 treated with oral Prednisolone. With her PV controlled, prednisolone was gradually tapered to 5 mg per week. While on weekly prednisolone, she started to experience severe symptoms of hypoglycaemia. Cosyntropin stimulation test showed a good response which excluded adrenal insufficiency as the cause of hypoglycaemia. Prolonged fasting test showed that she had endogenous hyperinsulinaemic hypoglycaemia. C-peptide was 348 pmol/l with insulin of 3 miu/l while fasting blood sugar was 1.7 mmol/l. Liver function tests and renal profile were normal.

Computed Tomography (CT) Scan and Magnetic Resonance Imaging (MRI) of the pancreas, and Endoscopic ultrasound (EUS) and Gallium-68 Dotatate PET/CT scan showed the presence of two pancreatic lesions at the head and tail of the pancreas. Fine needle aspiration cytology (FNAC) during EUS showed that the tail lesion was a Grade 1 neuroendocrine tumour. However, samples from the head lesion were unsatisfactory. Arterial stimulation and venous sampling (ASVS) confirmed that the lesion at the pancreatic tail was an insulin-secreting lesion. Oral diazoxide 100 mg twice daily was not tolerated due to bothersome leg oedema. Subsequently, hypoglycaemia resolved with successful RFA (Radio frequency ablation) of both lesions.

#### CONCLUSION

Hypoglycaemia caused by insulinoma can be masked with the use of glucocorticoids. Localization of insulinoma often requires multiple imaging, dynamic studies, and a multidisciplinary approach. RFA via EUS is a safe, minimally invasive, and effective technique for the treatment of insulinoma.