widely variable and have been erroneously attributed to other diagnoses. Compounding diagnostic uncertainty is the incidence of these symptoms in a patient with a psychiatric illness.
Clinical Case
A 51 year old male with hypertension and schizophrenia maintained on amlodipine, risperidone and benztropine was transported to the ER psychiatric unit by law enforcement. He was detained after he was found wandering the streets demonstrating increased verbal and physical aggressiveness. He was known to the unit, with previous admissions for psychosis secondary to schizophrenia. On presentation vitals were solely significant for tachycardia. Physical and mental status examination revealed a dishevelled, agitated and combative male who was disoriented to time, person and location. He was actively experiencing visual and auditory hallucinations with psychomotor agitation, intermittent loosening of association, circumstantial speech and persecutory delusions. Initially given one dose of i.m. haloperidol and benztropine, his psychosis persisted. Biochemical investigations were significant for a glucose of 37 mg/dL; All others including alcohol level, toxicology and TSH were normal. Head CT was unremarkable. His HG was treated with i.v. dextrose with complete resolution of psychotic symptoms within one hour of normoglycemia. He needed no further antipsychotic doses save his maintenance risperidone. Further historical enquiry revealed a recent diagnosis of type 2 DM managed on metformin and glimepiride with poor oral intake. He was discharged on metformin and sitagliptin post extensive DM self-management education, h; glimepiride was discontinued.
Discussion
NG manifestations of hypoglycemia are the direct result of central nervous system glucose deprivation. Uncommonly, they can be the sole presenting complaint in the HG patient. In one study, 27% of patients with insulinomas had only NG symptoms [1]. Interestingly, some case reports suggest acute psychosis may be an important NG feature [2]. Psychiatric patients, particularly those with primary psychotic disorders often face a labyrinthine process when seeking emergent medical care including but not limited to anchoring and ascertainment physician bias. If unrecognized, HG can lead to neuronal death. Clinicians must maintain a high index of suspicion of HG in patients presenting with acute psychosis even in the presence of functional illness so as to reduce morbidity, mortality and medicolegal risk.
References
Dizon AM., Kowalyk S., Hoogwerf BJ. Neuroglycopenic and other symptoms in patients with insulinomas, Am J Med. 1999 Mar; 106(3):307-10.
Klemen P., Grmec S., Cander, D. Hypoglycemia masquerading as acute psychosis in young age. Crit Care. 2000; 4(Suppl 1): P172. doi: 10.1186/cc892.

Pediatric Endocrinology

ADVANCES IN PEDIATRIC OBESITY AND CANCER

PTEN Hamartoma Tumor Syndrome in Pediatrics: Triggers for Evaluation and the Value of Surveillance

Julia Baran, BS[1], Steven Tsai, BS[2], Daniel Singleton, BS[1], Amber Isaza, BS[1], Garrett Brodeur, MD[1], Suzanne MacFarland, MD[1], Kristin Zelley, MS[1], Petar Mamula, MD[1], Andrew Jacob Bauer, MD[1].
[1]The Children's Hospital of Philadelphia, Philadelphia, PA, USA, [2]University of Pennsylvania, Philadelphia, PA, USA.

OR22-02

Context: *PTEN* Hamartoma Tumor Syndrome (PHTS) comprises a collection of rare clinical disorders characterized by germline mutations in the tumor suppressor gene *PTEN*. Current guidelines recommend screening for thyroid tumors beginning in pediatric age at the time of PHTS diagnosis; however, the benefit of early surveillance has not been well defined. **Patients/Objective:** We conducted a retrospective, single-site cohort investigation of patients followed at the Children's Hospital of Philadelphia with diagnosis of PHTS between January 2003 - June 2019. In total, 81 patients under 18 years of age were identified. Clinical features, *PTEN* mutation codon, thyroid and gastrointestinal (GI) features were extracted from the electronic health record. The aim of the study is to assess genotype-phenotype, the incidence of thyroid and gastrointestinal disease, and to determine whether current recommendations for thyroid surveillance are improving outcomes. **Results:** The most common clinical feature at presentation was macrocephaly (85%) followed by impaired development (42%), skin/oral lesions (31%), and autistic spectrum disorder (27%). GI polyps were the presenting feature in 5 patients, with 14 of 81 patients ultimately diagnosed secondary to constipation (71%), rectal bleeding (64%), and/or abdominal pain (50%). All polyps were benign. A total of 58 of 81 patients underwent thyroid surveillance, with 30 patients (52%) found to have a nodule(s). Ultimately, 16 patients underwent thyroidectomy, with 31% (5/16) diagnosed with thyroid cancer. All thyroid cancer patients were greater than 10 years of age at diagnosis and all displayed low-invasive behavior (ATA low-risk). Of the patients &lt 10 years at the time of thyroid ultrasound (US) surveillance, 74% (14/19) had a normal US. The remaining five patients who underwent thyroid surgery all had benign histology. No genotype-phenotype relations were found; however, patients with identical mutations were found to have similar clinical features. **Conclusions:** Patients with macrocephaly associated with impaired development, skin/oral lesions, thyroid nodules and/or early onset GI polyps should undergo germline testing for PHTS. There does not appear to be a clinical advantage to initiating thyroid US surveillance prior to 10 years of age. Early detection may not improve outcome of thyroid cancer as the majority of thyroid cancers display low-invasive behavior. In PHTS patients with a normal physical exam, thyroid ultrasound surveillance can be delayed until after 10 years of age. Early onset GI polyps may be the presenting diagnosis of PHTS.

Diabetes Mellitus and Glucose Metabolism

DIABETES DIAGNOSIS, TREATMENT AND COMPLICATIONS

Decision Analysis for Glucagon-Like Peptide Receptor Agonists vs. Sodium-Glucose cotransporter2 Inhibitors in Type 2 Diabetes Mellitus

Ali Al khazaali, MD, Alexis Mckee, MD, Anjul Sharma, MD, Stewart Albert, MD.
Saint Louis University, Saint Louis, MO, USA.

SUN-618

Background: Cardiovascular outcome trials (CVOT) of glucagon-like peptide-1receptor agonists (GLP-1 RA)