ABSTRACT

Introduction: Insulinoma is a rare neuroendocrine tumor that is usually sporadic and solitary which causes inappropriate release of Insulin, resulting in episodes of hypoglycemia. It classically present with neuroglycopenic and autonomic sympathetic symptoms and resolve promptly following administration of glucose. Demonstration of elevated C-peptide levels in the presence of hypoglycemia and absence of plasma Sulfonylurea is suggestive of the diagnosis. Pre-operative localization of the tumor is essential.

Case presentation: A 33-year-old previously healthy male was admitted with recurrent episodes of loss of consciousness lasting 1-2 minutes, particularly in the early morning, after skipping meals, and following exertion. These episodes were accompanied by symptoms of sweating, jitteriness, anxiety, and hunger, which resolved with sugary meals. Examination revealed an overweight patient with no signs of anemia, jaundice, or skin pigmentation. Rest of the systemic examination was unremarkable. Low blood glucose levels during episodes with markedly elevated serum insulin and C-peptide levels confirmed the presence of endogenous hyperinsulinemia. These findings are indicative of a potential insulinoma, a rare pancreatic neuroendocrine tumor associated with recurrent hypoglycemia.

Conclusion: Prompt clinical suspicion, rigorous diagnostic follow-up, and timely surgical intervention are imperative in the management of insulinoma, a typically benign yet potentially life-threatening tumor, highlighting the crucial role of clinician vigilance in preventing fatal hypoglycemic incidents.