Seized by Insulin- A case of Insulinoma in a 37- year- old female misdiagnosed as Psychogenic Non-epileptic seizures for several years

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Introduction

- Insulinomas are the most common functioning endocrine neoplasms of the pancreas.
- Diagnosis is challenging as the symptoms are mostly non-specific.
- Here we discuss a case of insulinoma, treated as psychogenic nonepileptic seizures (PNES) for several years

Case description

- A 37-year-old female with past medical history of PNES and anxiety was admitted to ICU for seizures that were refractory to management.
- The patient had first seizure like activity 5 years ago, which progressively got worse over the years.
- The patient had undergone thorough neurological evaluation including normal brain imaging, EEG and continuous video EEG. She was subsequently diagnosed to have PNES and was managed with sertraline and cognitive behavioural therapy, with no improvement.
- On presentation, she had severe hypoglycaemia (<20mg/dl), refractory to management with D10 and D50. Labs were significant for Insulin 111uU/ml [3-25uU/ml], pro insulin 201.8pmol/L [<or=18pmol/L].
- CT of abdomen revealed pancreatic tail mass concerning for insulinoma (Figure 1), which was confirmed by MRI which showed 3.7 cm pancreatic tail mass (Figure 2).

- The patient underwent pancreatic tail resection with splenectomy and pathology revealed Grade 1 insulinoma.
- She was discharged on continuous glucose monitoring, blood sugars were initially in the 40's, but normalised to 80 125 within few days. The patient reports no seizure like activity thereafter.
- Genetic testing for MEN 1 syndrome was negative.



Figure 1: CT abdomen/ pelvis showing hyperenhancing pancreatic tail mass

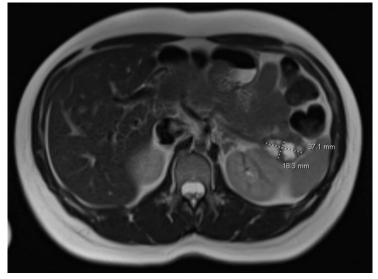


Figure 2: MRI abdomen showing 3.7 cm pancreatic tail mass

Discussion

- This patient does not belong to the typical age group at diagnosis, especially in the absence of family history of MEN-1 syndrome.
- She had glucose tolerance test of 40 during pregnancy several years ago, but absence of other hypoglycaemic workup potentially delayed the diagnosis.

Conclusion

- This highlights the importance of ruling out reversible, yet fatal causes of seizures, like hypoglycaemia.
- Insulinoma is often misdiagnosed and hence, clinicians should have a strong suspicion for hyperinsulinemia when patients present with seizures, especially when neurologic causes have been ruled out.