A rare case of Insulinoma, developed in a female patient with long standing history of Type 2 Diabetes Mellitus complicated by diazoxide induced renal failure

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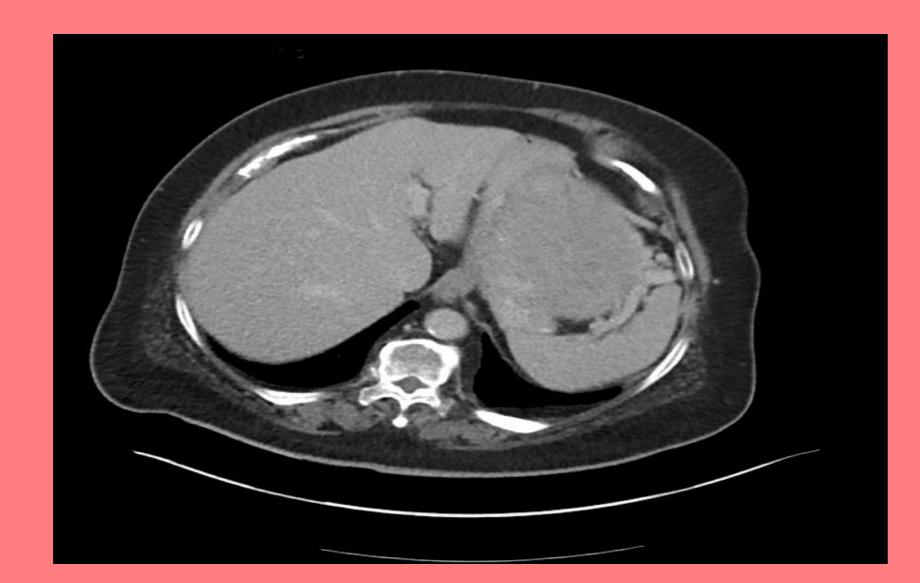


Objectives

To describe a patient with Type 2 Diabetes Mellitus on Gliclazide and metformin who presented to endocrine clinic with hypoglycaemic symptoms.

Methods

We are presenting a rare case of insulinoma in a pre existing case of type 2 diabetes mellitus. A 73 years old female patient with a 35 years history of type 2 diabetes mellitus presented to endocrine clinic with hypoglycaemic symptoms, ultimately diagnosed with insulinoma and patient developed renal failure with diazoxide treatment.



Pre-op CT Abdomen



Post-op CT Abdomen

Results

A 73 years old Chinese lady was referred to our endocrine clinic with episodes of recurring severe hypoglycaemia for 12 months. She was a type 2 diabetic patient for 35 years using Gliclazide and metformin. The Gliclazide was stopped but hypoglycaemic induced seizures continue. She used to take up to four 500ml bottles of Lucozade a day to correct and treat her hypoglycaemic symptoms. Eventually all her hypoglycaemic drugs were stopped because of dramatic improvement in HBA1C (28) mmol) but still she was have frequent severe hypoglycaemic episodes needing paramedics and A&E attendances at least 3 times a months. She was also having to eat very high carbs meals 4 times a day to reduce frequency of paramedics call.

A plan was made to admit her for a standard prolonged (upto 72 hours) fasting test under senior SpR supervision. She developed severe hypoglycaemic (1.9 mmol) episode within 6 hours of admission fast. Her biochemical profile was consistent with insulinoma with raised Insulin (1230 pmol/L) and C Peptide (3583 pmol/L) levels. An ultrasound abdomen showed possible mass in distal pancreas which was confirmed by CT abdomen. She was started on Diazoxide and in few days she developed vasodilation and Diazoxide toxicity. She developed AKI secondary to Diazoxide and was transferred to ITU for hemofiltration. Diazoxide was stopped and Octreotide was commenced as alternative in an effort to stabilise her while waiting for her urgent surgery. She had distal pancreatectomy after MDT discussion and histology was consistent with well differentiated neuroendocrine tumour, grade 1 with ki67 index 4.

Conclusions

As demonstrated by above case, a rapid unexpected glycaemic improvement and/or repeated hypoglycaemia in a patient with Diabetes Mellitus, should prompt a vigilant work-up for any undiagnosed underlying sisister pathology, after exclusión of common causes of hypoglycaemia.

References

Service FJ, McMahon MM, O'Brien PC, et al. Functioning insulinom incidence, recurrence and long term survival of patients: A 60-year study. Mayo Clin Proc 1991;66 (7):711-9

Nagai T, Imamura M, Takai Y, et al. Insulinoma accompanied by Diabetes mellitus. Diabetes Research Clin Pract 2003;60(1):19-23



