

Insulinoma misdiagnosed as alcohol induced hypoglycaemia

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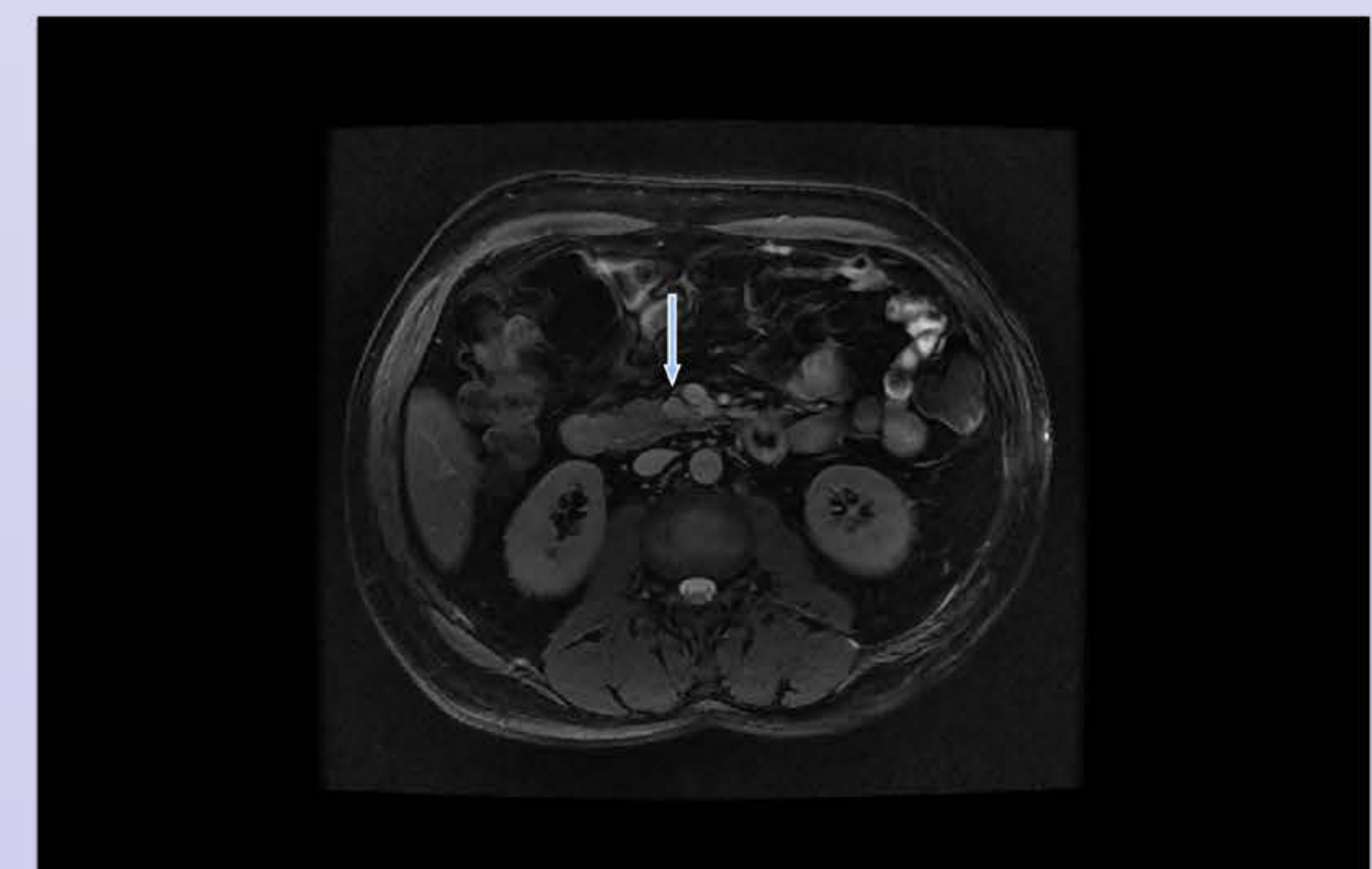
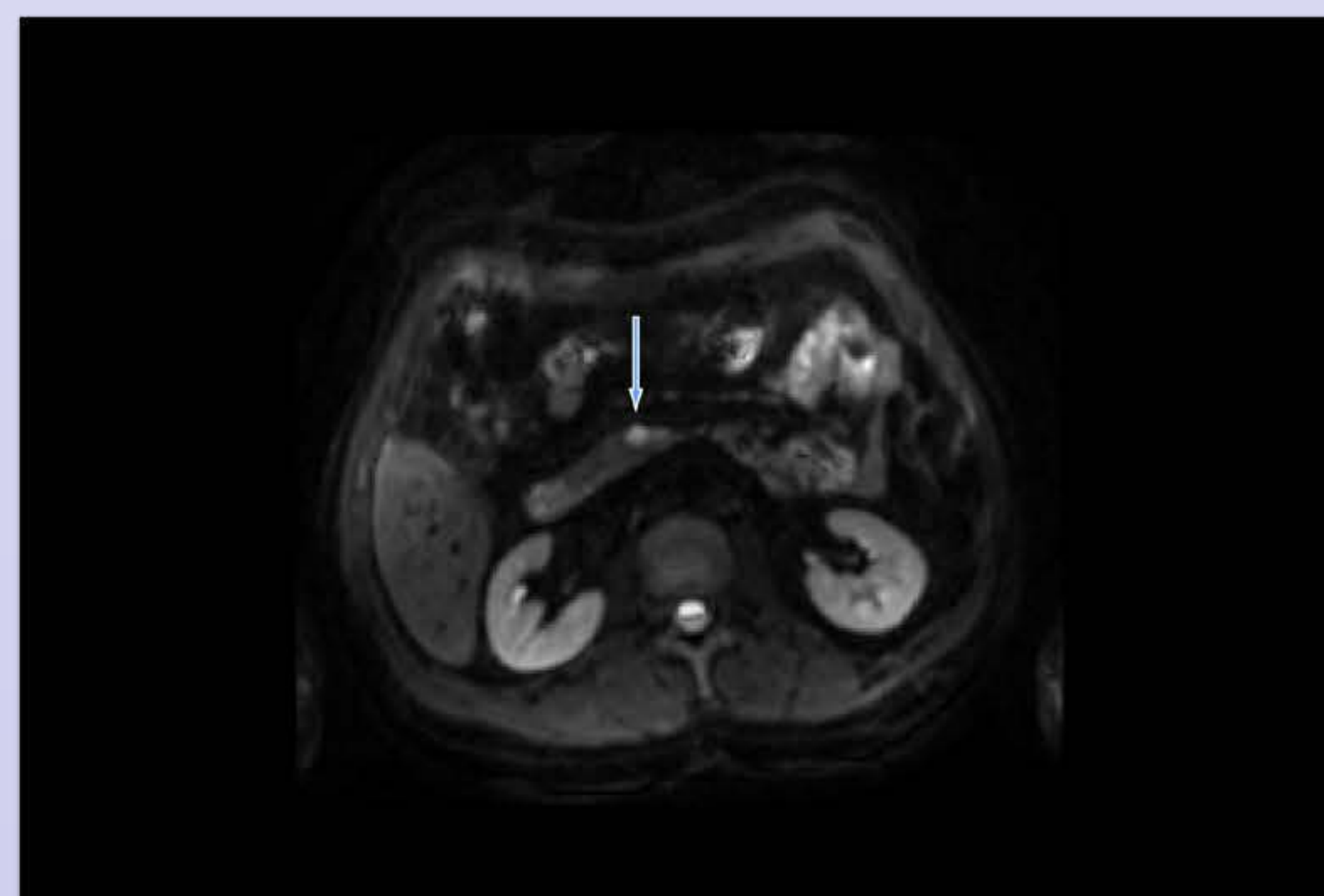
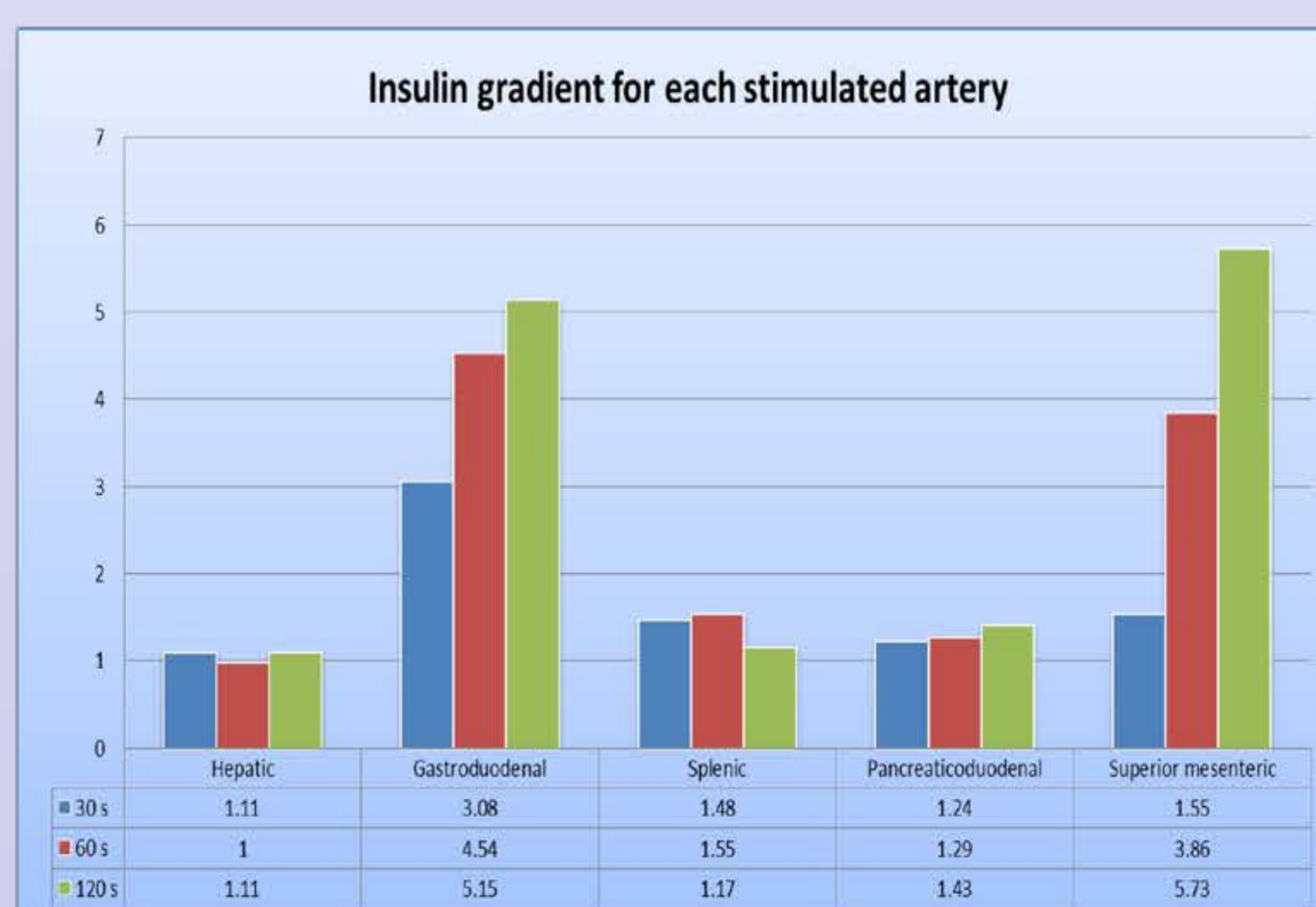
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Case History

- ❑ A 48 years old male presented with an acute episode of dizziness, weakness, diaphoresis, palpitations, and shakiness.
- ❑ Hypoglycaemia was confirmed with a capillary blood glucose (CBG) of 1.6 mmol/L.
- ❑ His symptoms resolved on treatment with Hypostop gel and 10% dextrose.
- ❑ He had an otherwise unremarkable physical examination.
- ❑ In view of his history of consumption of a bottle of vodka daily a diagnosis of alcohol induced hypoglycaemia was made on discharge.
- ❑ A year later he was found being agitated and aggressive in a shopping centre requiring restraint by police. This was followed by collapse with a CBG of 0.6 mmol/L.
- ❑ He reported having had similar symptoms, of lesser severity, for approximately 2-yr duration, which continued despite his cutting down drinking to 1 pint beer weekly.

Further Management

- ❑ Whipple's triad was positive.
- ❑ Endogenous hyperinsulinemic hypoglycaemia was suspected.
- ❑ Insulin level 55 pmol/L (reference range 12-150), C-peptide level 850 pmol/L (reference range 350-1800), Betahydroxybutyrate < 100 umol/L, venous blood glucose (VBG) 2.0 mmol/L; insulin antibodies and sulphonylureas screen were negative.
- ❑ Diazoxide and continuous dextrose infusion were initiated as he had recurrent hypoglycaemic episodes with seizures.
- ❑ CT abdomen revealed left adrenal incidentaloma which proved non-functional.
- ❑ MRI pancreas and Octreotide scan were normal.
- ❑ Endoscopic ultrasound suggested 11x13 mm hypoechoic mass in the pancreatic head which had a differential of insulinoma or an inflammatory lesion.
- ❑ To obtain a more definitive evidence of insulinoma an intra-arterial calcium stimulation test was performed which revealed positive rises in the hepatic vein insulin when gastroduodenal and superior mesenteric arteries (supplying the head of pancreas) were injected.
- ❑ Although a Redo-endoscopic ultrasound with FNA was non-diagnostic; a repeat MRI pancreas revealed a 10mm lesion in the uncinata process. Enucleation of the tumour with occlusion of small vascular feeding branches was successful.
- ❑ The frozen section sample confirmed well differentiation neuroendocrine tumour.
- ❑ The patient was discharged in good health with safe glucose levels.



Conclusion

In view of its elusive and deceptive nature, insulinoma can pose a diagnostic challenge even to an experienced clinician. Accurate biochemical diagnosis and precise preoperative anatomic localization of insulinoma are highly desirable for effective and safe surgery.