(P10): Glucagonoma: a rare cause of diabetes

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A 55-year-old lady had presented with pain in her abdomen and dyspeptic symptoms 6 years ago. She was known to have depression, treated by psychiatrists, as well as osteoarthritis, on NSAID. An oesophagogastroduodenoscopy was normal. Ultrasound abdomen was unremarkable except haemangioma of the right lobe of the liver. She then developed diarrhoea with a history suggestive of steatorrhoea. Clinical examination, blood investigations as well as repeat gastroscopy, barium follow-through and flexible sigmoidoscopy were normal. A diagnosis of irritable bowel syndrome was made. She then developed diet controlled diabetes with some history of weight loss. Two years ago she was admitted with uncontrolled diabetes and started on insulin. An urgent CT scan of her abdomen revealed a heterogeneous mass head of pancreas with atrophic body and tail with multiple liver metastases. Subsequent liver biopsy and histopathology confirmed a metastatic neuroendocrine tumour of the pancreas; 24-hour urinary 5HIAA was normal. Fasting gut hormone profile showed an elevated glucagon level of 214(<50) confirming glucagonoma. She was started on alpha interferon as well as Creon with much benefit. Soon after, her diabetic control worsened. She had low mood, complained of profound lethargy and worsening arthralgia and myalgia. Interferon was stopped. Subcutaneous octreotide was started, followed later by Sandostatin LAR which helped with reducing the insulin requirement as well as better control of her diabetes. Unfortunately, her scans suggest progressive disease and an MIBG uptake scan followed by possible MIBG treatment is planned.

Glucagonomas are rare tumours and fewer than 250 cases have been described in the literature. In patients with a diagnosis of diabetes and irritable bowel syndrome a careful evaluation is necessary to rule out neuroendocrine tumours.