Gastrinomas are neuroendocrine tumours usually located in the duodenum or pancreas. These tumours secrete gastrin resulting in gastric acid hypersecretion and severe acid-related peptic disease (Zollinger-Ellison syndrome).

A 50 years old male was seen as an out-patient for review of a pancreatic gastrinoma diagnosed in 1976 when he was 19 years old. At the time of diagnosis, he presented with gastrointestinal bleeding, multiple oesophageal and duodenal ulcers and a confirmed elevated fasting serum gastrin with high gastric acid output. At this time, he was treated with a H2 receptor antagonist, cimetidine, which resulted in symptomatic control of his disease. Subsequent CT imaging demonstrated a small (2x1.5 cm) hypodense lesion in the tail of the pancreas, which was compatible with a neuroendocrine tumour. Repeat imaging showed no change in the appearance of the lesion and there was no evidence of metastases.

Surprisingly, following cessation of the cimetidine in 2001, his gastrin levels remained within the normal range. He was also completely asymptomatic with no dyspepsia, abdominal pain, diarrhoea, bleeding, nausea, vomiting or weight-loss. He was followed-up with an annual fasting gut hormone profile (including gastrin somatostatin, glucagon, VIP, pancreatic polypeptide, neurotensin, chromogranin and chromogranin B GAWK fragment) and MEN1 screen (including serum parathyroid hormone, calcium and prolactin levels) which all remained within normal limits.

Subsequent whole-body octreotide scans in 2003 and 2006 showed no evidence of abnormal uptake, consistent with this patient’s resolved clinical condition. Interestingly, an abdominal MRI reported a small low signal area in the posterior aspect of the tail of the pancreas more suggestive of scar tissue than a neuroendocrine tumour. Therefore, it is probable that this patient spontaneously infarcted his pancreatic gastrinoma resulting in a clinical cure for his disease.