Unusual Presentation of a Pancreatic Neuroendocrine Tumour – Case Report

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Context

Malignancy-related hypercalcemia is a relatively common paraneoplastic syndrome, but has only been described in a few cases of neuroendocrine tumours (NET).

Case illustration

We report the case of a 64 year-old woman admitted with nonspecific abdominal discomfort, weight loss and fatigue. She was found to have severe hypercalcemia - calcium 4.07 nmol/L (normal: 2.2-2.6nmol/L). The PTH level was appropriately suppressed 10 pg/ml (normal: 5-50 pg/ml), with a normal 25-hydroxyvitamin D: 65.5pg/ml (normal: 50-90pg/ml). Serum and urine protein electrophoreses were both normal.

Abdominal CT showed a large mass at the tail of the pancreas and numerous hyperdense hepatic lesions, suggestive of metastatic dissemination. Isotope bone scan, OGD and colonoscopy were unremarkable. A CT-guided liver biopsy demonstrated a well differentiated Neuroendocrine Tumour (NET) with a proliferation index (Ki-67) of 6%. A whole body octreotide scan confirmed the above findings. Chromogranin A was elevated at 369 ng/ml (normal: 19.4-98ng/ml). Other biochemical markers related to a diagnosis of NET were within normal range.

In relation to the hypercalcemia, PTHrP levels were within normal range but 1,25dihydroxy vitamin D was elevated at 202 pmol/L (normal: 48-190 pmol/L). Calcium corrected with hydration and intravenous bisphosphonate.

The patient was referred to the neuroendocrine service in St Vincents for surgical resection and further treatment.

Discussion

The secretion of PTH-rP is the most common cause of malignant hypercalcemia. However in this case, the etiology of the hypercalcemia appeared to be the secretion of 1,25-dihydroxyvitamin D by the underlying pancreatic NET.