3-Methoxytyramine (4.46 umol/day). Adrenal CT showed a well-defined, enhancing lesion at the aortocaval region, measuring 5.1×5.8×7.0 cm. CT scans of the neck and thorax were unremarkable. A Gallium-68 PET scan demonstrated SSTR-avid uptake in the aortocaval mass, with no evidence of SSTR-avid disease elsewhere. Currently, she requires three antihypertensive agents to control her blood pressure while awaiting surgical intervention.

A 67-year-old Malay female with underlying hypertension, diabetes, and ischaemic stroke had multiple admissions for urosepsis. Ultrasound revealed a bladder mass suspicious for malignancy, a left ureteric stone, and hydronephrosis. CT and MRI showed a 4.0×3.6×3.7 cm heterogeneously enhancing mass arising from the right lateral bladder wall. She underwent transurethral resection of bladder tumour (TURBT); intraoperatively, her blood pressure was labile with systolic BP of 65-320 mm Hg. Histopathology confirmed paraganglioma. Post-operative 24-hour urine normetanephrines were four times the upper limit of normal. Due to her poor performance status, she was managed conservatively. Her blood pressure is currently controlled on double antihypertensives.

**CONCLUSION**

Paragangliomas can present variably depending on their anatomical origin and catecholamine-secreting status. A high index of suspicion, appropriate biochemical testing, and functional imaging are key to diagnosis. Individualized management is essential, especially in patients with comorbidities or poor performance status.

## EP_A145

### STEROID-UNMASKED CENTRAL DIABETES INSIPIDUS IN A PATIENT WITH PITUITARY METASTASIS FROM BREAST CARCINOMA: A CASE REPORT

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**INTRODUCTION/BACKGROUND**

Pituitary metastases are rare but clinically significant, most commonly originating from breast or lung cancers. Diabetes insipidus (DI) is the most frequent manifestation of posterior pituitary involvement. We describe a case of pituitary metastasis presenting with panhypopituitarism and central diabetes insipidus (CDI), initially unmasked by adrenal insufficiency.

**CASE**

A 68-year-old female with metastatic left breast carcinoma, post-mastectomy and on hormonal therapy, presented with a generalized tonic-clonic seizure and a Glasgow Coma Scale (GCS) score of 4. She exhibited persistent hypoglycemia requiring repeated dextrose corrections, along with hypotensive episodes.

Brain CT revealed a well-defined iso-to-hyperdense lesion in the sellar and suprasellar regions (2.0 × 2.5 × 3.0 cm). Subsequent pituitary MRI showed a heterogeneously enhancing lobulated mass (2.2 × 2.5 × 3.0 cm) with loss of normal anterior pituitary architecture.

Laboratory tests confirmed adrenal and thyroid insufficiency, with a random cortisol level of 284 nmol/L, TSH at 0.072 μIU/mL, and free T4 below 3.20 mmol/L. Hydrocortisone therapy was initiated, leading to a significant increase in serum sodium from 132 to 160 mmol/L. Serum and urine osmolality measured 318 and 183 mOsm/kg, respectively, with urine sodium under 10 mmol/L, raising suspicion for CDI. Desmopressin was commenced, resulting in improved sodium (145 mmol/L) and osmolality levels (serum 335 mOsm/kg, urine 646 mOsm/kg). Gonadotropin levels (FSH, LH) and estradiol were also low, indicating panhypopituitarism.

A multidisciplinary team confirmed pituitary metastasis secondary to breast carcinoma. The patient was transitioned to palliative care with hormone replacement: hydrocortisone, desmopressin, and levothyroxine.

**CONCLUSION**

Hypocortisolism in breast cancer patients should raise suspicion for pituitary metastasis. Polyuria after steroid therapy may indicate underlying central diabetes insipidus. Prompt diagnosis and hormone replacement can significantly enhance symptom management and patient well-being.

## EP_A146

### A CURIOUS CASE OF RECURRENT HYPOGLYCAEMIA IN NEUROFIBROMATOSIS

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**INTRODUCTION/BACKGROUND**

Neurofibromatosis type 1 (NF-1) is commonly associated with neural tumors such as pheochromocytomas, para-

gangliomas, and duodenal somatostatinomas. However, its association with insulinoma is extremely rare, with only a few cases reported.

**CASE**

A 66-year-old female with longstanding NF-1 presented with a six-month history of recurrent symptomatic hypoglycaemia. She was non-diabetic, lived in a nursing home, and had no history of hypoglycaemic agent use. Her episodes, typically occurring during fasting, were associated with intense hunger and resolved with food intake. Capillary glucose readings ranged from 1.7 to 3.1 mmol/L. She was admitted after being found unconscious with a glucose level of 1.7 mmol/L. Clinical examination revealed multiple dermal neurofibromas and café-au-lait spots. In the ward, paired samples during spontaneous hypoglycaemia (glucose 1.6 mmol/L) showed inappropriately elevated insulin (53.9 pmol/L) and C-peptide (465 pmol/L). After intramuscular glucagon (1 mg), her blood glucose rose from 3.0 to 6.4 mmol/L over 60 minutes. Morning cortisol (450 nmol/L) and IGF-1 (113.5 ng/mL) were normal. β-hydroxybutyrate, IGF-2, and sulphonylurea levels were not tested due to financial limitations. These findings confirmed the presence of endogenous hyperinsulinaemia. A pancreatic CT scan was scheduled to localize the suspected insulinoma but was missed twice. She later re-presented with a seizure, likely secondary to hypoglycaemia, as both brain CT and EEG findings were unremarkable. To better control her hypoglycaemia, diazoxide and a calcium channel blocker were initiated. Imaging was subsequently rescheduled to aid in localizing the insulinoma.

**CONCLUSION**

Although rare, insulinoma should be considered in NF-1 patients presenting with recurrent hypoglycaemia. Early recognition and appropriate investigation are crucial to prevent serious complications.

## EP_A147

### POLYGLANDULAR AUTOIMMUNE SYNDROME TYPE 3: THE UNEXPECTED TRILOGY

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**INTRODUCTION/BACKGROUND**

Polyglandular autoimmune syndromes (PGAS) are a rare group of disorders characterized by the presence of two or more autoimmune endocrine diseases. Polyglandular autoimmune syndrome type 3 (PGAS-3) is characterized by the presence of autoimmune thyroid disease associated with other autoimmune diseases excluding adrenal insufficiency and hypoparathyroidism. This case report focuses on a patient who developed a sequential presentation of pernicious anemia, Graves' disease, and later type 1 diabetes mellitus (T1DM), raising suspicion for PGAS-3.

**CASE**

A 30-year-old male presented in 2019 with fatigue, weight loss, and palpitations. Initial investigations revealed pancytopenia with Hb 4 mmol/L, WBC 3.99 mmol/L, PLT 87 mmol/L and a critically low vitamin B12 level, alongside positive anti-parietal cell antibodies, indicative of pernicious anemia. Oesophagogastroduodenoscopy (OGDS) was done later in 2023, showing pangastritis. Concurrently, the patient was found to have hyperthyroidism with positive thyroid antibodies, consistent with Graves' disease. He was treated with subcutaneous cyanocobalamin and antithyroid medications, resulting in partial improvement. He underwent radioactive iodine therapy for Graves' disease. Four years later, the patient was hospitalized for uncontrolled diabetes mellitus. Insulin autoantibodies were requested and results of anti-islet cell antibodies, anti-glutamic acid decarboxylase and anti-insulinoma-associated antigen-2 were positive, leading to the diagnosis of T1DM. Adrenocorticotropic hormone (ACTH) and early morning serum cortisol were normal, excluding adrenal involvement. The coexistence of Graves' disease, pernicious anemia, and T1DM fulfilled the diagnostic criteria for PGAS-3. Genetic testing and further autoimmune screening were recommended for a more comprehensive understanding of the underlying pathophysiology.

**CONCLUSION**

The patient's progression from pernicious anemia to Graves' disease followed by T1DM is consistent with polyglandular autoimmune syndrome type 3. Clinicians should be vigilant in identifying PGAS in patients with multiple autoimmune endocrine disorders to ensure appropriate diagnosis and treatment, mitigating its potential long-term consequences.