

## PA-A-45

### CASE REPORT OF NON-INSULIN-DEPENDENT HYPOGLYCAEMIA IN RECURRENT SOLITARY FIBROUS TUMOUR OF THE LUNG

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#### INTRODUCTION

Non-islet cell tumour hypoglycaemia (NICTH) is a rare paraneoplastic syndrome that secretes insulin growth factor 2 (IGF2), which results in stimulation of the insulin receptor and subsequently induces hypoglycaemia. Most commonly, IGF2-linked hypoglycaemia has been observed in patients with solid tumours that are either of mesenchymal or epithelial origin, such as hepatocellular carcinomas, adrenocortical tumours, fibrosarcomas and mesotheliomas.

#### CASE

A 69-year-old male with underlying hypertension and history of excision of a left solitary fibrous tumour of the left lung 7 years ago presented with recurrent left lung exudative pleural effusion. Chest radiography and CT imaging revealed a left lung mass. Ultrasound-guided biopsy was performed and the histopathology demonstrated recurrence of the solitary fibrous tumour. Debulking surgery was planned; however, while waiting for the surgery, he presented with impaired consciousness and serum glucose on admission was 1.4 mmol/L. He had no prior history of hypoglycaemia. He developed recurrent hypoglycaemia despite continuous dextrose infusion and dietary intervention.

At the time of hypoglycaemia, the levels of insulin and C-peptide were suppressed, consistent with non-insulin-mediated hypoglycaemia. Additionally, IGF1 levels were below the normal range and his renal, liver and adrenal function were normal. He was started on oral prednisolone and subsequently underwent median sternotomy and tumour debulking surgery. Histopathological examination confirmed recurrent left lung solitary fibrous tumour. Hypoglycaemia resolved after tumour resection and prednisolone and dextrose infusion were discontinued. After 1 year of follow up, the patient remained well without any further reported hypoglycaemic episodes.

#### CONCLUSION

Solitary fibrous tumour is a rare tumour that induces NICTH due to overproduction of IGF2. It is interesting that a few cases reported episodes of hypoglycaemia on recurrence of the tumour, rather than at the initial presentation.

## PA-A-46

### CLINICAL CHARACTERISTICS OF PARATHYROID HORMONE-DEPENDENT HYPERCALCAEMIA: A CASE SERIES ON THE SERDANG EXPERIENCE

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#### INTRODUCTION

Primary hyperparathyroidism (PHPT) is characterized by hypercalcaemia with elevated or inappropriately normal parathyroid hormone (PTH) and can be due to parathyroid adenoma, hyperplasia, and carcinoma. The presentation varies from asymptomatic to symptomatic disease with osteoporosis, pancreatitis, and nephrolithiasis. The aim of this review is to look at the common clinical characteristics of PTH-dependent hypercalcaemic patients presented to Serdang Hospital.

#### METHODOLOGY

Retrospective analysis was performed to identify patients with PTH-dependent hypercalcaemia investigated and managed by the Endocrine Unit of Hospital Serdang from the years 2018 to 2022. Their clinical characteristics, presentations, complications and outcomes of hypercalcaemia were recorded for descriptive analysis.

#### RESULTS

A total of 13 patients were recorded. Majority of patients with PTH-dependent hypercalcaemia were female (57.14%), with median age of 50 years old (IQR 41-61). Seven (7) out of 13 patients were symptomatic at presentation, with 2 patients presenting with neurological symptoms (fitting and altered mental status). Median corrected serum calcium at presentation was 3.1 mmol/L (IQR 2.9-3.6), phosphate was 0.8 mmol/L (IQR 0.66-0.91), and eGFR was 74.8 ml/min per 1.73m<sup>2</sup> (IQR 35.8-97.3). Median level of Vitamin D was 43.16 nmol/L (IQR 29.69-56.12). Positive parathyroid ultrasound (USG) findings were found in 5 out of 13 patients, the results concordant with their sestamibi scans, while another 4 had negative USG but positive sestamibi. Four patients had nephrocalcinosis at diagnosis. Three patients underwent parathyroid operation and histopathology revealed 1 case of parathyroid carcinoma, 1 parathyroid adenoma and 1 parathyroid hyperplasia. 1 case was associated with mediastinal NET, 1 case is PHPT in pregnancy and is awaiting surgery.

#### CONCLUSION

In conclusion, the majority of our PHPT patients in Serdang Hospital have symptomatic disease that require surgery.