

## CONCLUSION

Despite a total RAI dose of 40mCi, her Graves' Disease remained active and thyroidectomy would be the next option. Her resistance to RAI may be related to her predominant pattern of elevated fT3 levels. The mechanism of this is unclear but may be related to impaired RAI uptake by the thyroid gland. Future studies may be useful to evaluate this further.

## PA-A-38

### CHARACTERISTICS OF COVID-19 PATIENTS WITH HYPERGLYCAEMIC EMERGENCY AND MORTALITY OUTCOMES: SINGLE CENTRE EXPERIENCE IN PAHANG

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## INTRODUCTION

Individuals with diabetes have similar risk of contracting COVID-19 infection compared to those without diabetes. However, COVID-19 patients with diabetes are at a higher risk for severe outcomes and death. The occurrence of hyperglycaemic emergency and diabetic ketoacidosis (DKA) may worsen the outcomes of COVID-19 infection. This study will determine the characteristics of COVID-19 patients admitted with hyperglycaemic emergency and mortality outcomes in Hospital Sultan Haji Ahmad Shah, Temerloh, Pahang.

## METHODOLOGY

All electronic records of COVID-19 patients admitted from March 2021 until March 2022 were reviewed for occurrence of hyperglycaemic emergency. Data regarding demographics, clinical presentation, laboratory investigations and clinical outcomes were collected. Further analysis with patients subcategorised into 2 timelines: March-December 2021 (group 1) and January-March 2022 (group 2) reflecting two surges of COVID-19 admission to the hospital was done.

## RESULTS

Twenty-four COVID-19 patients with hyperglycaemic emergency [mean age 56.7 (SD 15.6) years, 54.2% female, 79.2% Malay ethnicity, 95.8% type 2 diabetes mellitus, 54.2% unvaccinated, 70.8% category 5 infection] were analysed. Majority of patients had DKA at 79.2% [mean pH 7.16 (SD 0.12), mean HCO<sub>3</sub> 10.80 (SD 3.07), mean glucose at diagnosis 25.3 (SD 11.0) mmol/L]. The mean length of hospitalisation was 11.42 (SD 7.4) days and mortality rate was 63.2%. Nine DKA cases were detected in group 1 compared to 10 cases during the shorter timeline in group 2. All patients had resolved DKA but the majority succumbed later due to complications of COVID-19 infection. Mortality rates in both groups were 66.7% (n=6) and 60% (n=6), respectively.

## CONCLUSION

Despite high occurrence of uncontrolled diabetes during COVID-19 infection in this cohort, only a small proportion had hyperglycaemic emergency. In both timeline of hospitalisation surge, COVID-19 patients with concomitant hyperglycaemic emergency had poorer prognosis.

## PA-A-39

### A CASE OF HYPERCALCEMIA CRISIS IN PREGNANCY DUE TO GIANT PARATHYROID ADENOMA

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## INTRODUCTION

Hypercalcemia in pregnancy affects 0.03% of reproductive women. Complications are directly related to maternal calcium level and include maternal nephrolithiasis, kidney injury, pancreatitis, pre-eclampsia and fetal loss. Primary hyperparathyroidism accounts for >90% of cases.

## CASE

We report a 41-year-old female who presented at 4 weeks of gestation with a 1-week history of polyuria and 3-day history of epigastric pain.

Laboratory investigations showed the following: severe hypercalcemia with corrected serum calcium of 5.04 mmol/L, low serum phosphorous at 0.88 mmol/L, elevated intact PTH at 45.4 (NR: 1.6-6.0 pmol/L), acute kidney injury with serum creatinine of 221 umol/L, and pancreatitis with serum amylase of 368 (NR: 62-106 u/L). Electrocardiogram showed Osborn waves. Kidney ultrasound showed bilateral renal medullary nephrocalcinosis with nephrolithiasis. Neck ultrasound revealed a 2.8x2.9x5.1 cm well defined solid lesion postero-inferior to the right thyroid lobe suggestive of parathyroid tumour.