

## PA-A-49

### SERENDIPITOUS DISCOVERY OF HYPERCALCEMIA IN PREGNANCY IN A PATIENT WITH ASYMPTOMATIC BRADYCARDIA ON BETA BLOCKER

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#### INTRODUCTION

Hypercalcemia in pregnancy is uncommon and the diagnosis is challenging due to its nonspecific symptoms which may mimic those of pregnancy. The risk of adverse outcomes for the mother and neonate is significant and should be identified earlier.

#### CASE

We report a case of a patient with parathyroid-dependent hypercalcemia diagnosed in the third trimester of pregnancy with subsequent complications necessitating emergency caesarean section at 35 weeks of gestation.

A 30-year-old pregnant female with chronic hypertension presented at 30 weeks of gestation with asymptomatic bradycardia while on treatment with a beta blocker. She also complained of abdominal discomfort for the past week. On examination, her heart rate was 40-50 beats per minute with no other remarkable findings. Laboratory investigations revealed parathyroid hormone-dependent hypercalcemia with a serum calcium of 2.9 mmol/L and a parathyroid hormone level of 13.3 pmol. 24-hour urine calcium/creatinine clearance ratio was 0.06 and 25-hydroxyvitamin D level was adequate at 80.81 nmol/L. Neck ultrasonography was negative for parathyroid adenoma. Patient was admitted for hydration, however, due to persistent hypercalcemia, cinacalcet 25 mg daily was commenced at 33 weeks of gestation. Serial foetal growth scans demonstrated a small for gestational age (SGA) fetus. She presented at 35 weeks of gestation with severe preeclampsia, pancreatitis and serum calcium level of 3.03 mmol/L, requiring an emergency caesarean section. A male baby, weighing 1970 g, was delivered without any calcium disturbances observed. Patient's calcium levels remained elevated post-partum, requiring saline hydration and subcutaneous calcitonin. Her serum calcium level normalised over the next few days after a dose of pamidronate was given at day 4 post-partum.

#### CONCLUSION

Hypercalcemia in pregnancy may result in significant maternal and foetal complications. A high index of suspicion is required for early diagnosis and institution of treatment to improve maternal and foetal outcomes.

## PA-A-50

### EFFICACY OF 50% INSULIN LISPRO AND 50% INSULIN LISPRO PROTAMINE SUSPENSION(HUMALOG MIX50) VERSUS BIPHASIC INSULIN ASPART (NOVOMIX 30) IN PATIENTS WITH TYPE 2 DIABETES MELLITUS DURING RAMADAN

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#### INTRODUCTION

The month of Ramadan has always been challenging to patients and doctors due to the increased risk of hypo- and hyperglycaemia attributed to large meals during the breaking of fast. Previous studies demonstrated that both Humalog Mix 50 and NovoMix 30 are safe in Ramadan. However, there is little information on their efficacy and safety in Asian populations.

The aim of this study is to evaluate the efficacy and safety of Humalog Mix 50 in comparison to NovoMix 30 in patients with type 2 diabetes mellitus (T2DM) during Ramadan.

#### METHODOLOGY

We performed a prospective study in T2DM patients seen at the Endocrinology Clinic of UiTM in the year 2018, who fasted during Ramadan. They were randomized to receive either Humalog Mix50 or NovoMix 30. Weight and fructosamine pre- and post-Ramadan, capillary glucose at 4-points per day (pre-sahur, noon, pre-iftar and post-iftar) were recorded.

#### RESULTS

Twenty-three (23) patients (15 on NovoMix 30 and 8 on Humalog Mix 50) with an overall mean age of 57 were analysed.

NovoMix 30 showed a better glycaemic trend at pre-sahur ( $8.3 \pm 1.8$  vs  $9.3 \pm 1.4$ ), during the day ( $7.4 \pm 0.9$  vs  $7.7 \pm 1.5$ ), and 2-hours post-iftar ( $10.1 \pm 2.7$  vs  $10.4 \pm 3.8$ ), although not significant. There were 4 patients who experienced hypoglycaemia in the NovoMix 30 arm (one with glucose 3.3 mmol/L (noon during fasting), and the others with glucose 3.8 mmol/L. Fructosamine difference pre- and post-Ramadan showed reduction of 12.62 mmol/L (HbA1c 1.82%) with Humalog Mix 50 and 7.133 mmol/L (HbA1c 1.73%) with NovoMix 30 ( $p=0.69$ ).