PA-A-04

INITIATING/SWITCHING TO INSULIN DEGLUDEC/INSULIN ASPART (IDEGASP) IN MALAYSIAN PATIENTS WITH TYPE 2 DIABETES IN REAL-WORLD SETTING

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INTRODUCTION
IDegAsp, a co-formulation of long acting basal (insulin degludec) and rapid-acting bolus (insulin aspart) insulin is used for treating patients with type 2 diabetes mellitus (T2DM) not adequately controlled by previous anti-hyperglycaemic treatments (AHTs). The current study is a subgroup analysis of the Malaysian cohort of patients from the earlier 26-week prospective, multicentre, non-interventional ARISE study that investigated the effect of IDegAsp on glycaemic control in patients with T2DM initiated or switched to IDegAsp from previous AHTs in a real world setting in six countries, including Malaysia.

METHODOLOGY
Adult patients (>18 years old) with T2DM using any AHTs except IDegAsp were enrolled. Patients received IDegAsp according to their physicians' discretion. Primary endpoint was change in glycosylated haemoglobin (HbA1c) levels from baseline to end of the study (EOS, 26 weeks).

RESULTS
Overall, 182 out of the 205 enrolled patients (mean [SD] age: 56.4 [11.9] years) completed the study (95 men, 52.2%). Mean (SD) duration of T2DM was 11.2 (7.99) years. A total of 93 (51.1%) patients received IDegAsp once daily and 89 (48.9%) patients received twice daily at treatment initiation (mean (SD) daily dose: 29.1 [19.7] U). HbA1c levels were significantly reduced from baseline to EOS (mean [SE] estimated change from baseline: –1.3% [0.18]; $p<0.0001$). Consistent with this finding, FPG levels were also significantly reduced from baseline to EOS (mean [SE] estimated change from baseline: –1.8 [0.34] mmol/L; $p<0.0001$). The incidence of overall and nocturnal non-severe and severe hypoglycaemic events and the number of patients experiencing these events were also reduced from baseline to EOS.

CONCLUSION
In the Malaysian cohort, initiating or switching to IDegAsp in patients with T2DM demonstrated significant improvements in glycaemic control and numerically lower rates of non-severe and severe hypoglycaemic events.

PA-A-05

CHALLENGES IN FLUID MANAGEMENT OF AN END-STAGE RENAL DISEASE PATIENT WITH COVID-19 PNEUMONIA AND STARVATION KETOACIDOSIS

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INTRODUCTION
Fluid management is a delicate process when it involves an anuric end-stage renal disease (ESRD) patient on regular hemodialysis, who has Coronavirus Disease-19 (COVID-19) pneumonia in acute respiratory distress syndrome (ARDS). The management is made even more challenging when the condition of the patient is complicated with starvation ketoacidosis. There is limited literature with regards to this issue.

CASE
We report the case of a 55-year-old male patient with ESRD, who is suffering from COVID-19 pneumonia in ARDS with concomitant starvation ketoacidosis.

CONCLUSION

Starvation ketoacidosis is an under-recognized cause of metabolic acidosis and may occur even in a diabetic patient who has been acutely unwell with poor oral intake. While the mainstay of therapy in a patient with starvation ketoacidosis is to provide an intravenous dextrose-containing fluid replacement, this has to be judiciously given in an anuric ESRD patient on fluid restriction. A careful balance between low-dose insulin infusion to maintain euglycemia and strict fluid management is crucial to stop gluconeogenesis and ketogenesis. The ultimate goal is to bring the patient out of starvation ketoacidosis while avoiding the deleterious effect of fluid overload in a patient who is already in ARDS.

PA-A-06

AN UNUSUAL SITE FOR THYROID CANCER: A CASE REPORT ON ECTOPIC PAPILLARY THYROID CARCINOMA

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INTRODUCTION

Ectopic thyroid tissue is rare, and the prevalence of ectopic thyroid cancer is even rarer. We report the case of a 37-year-old female with ectopic papillary thyroid carcinoma.

CASE

A 37-year-old female initially presented to the Ear, Nose and Throat (ENT) clinic with a midline upper anterior neck swelling that had gradually increased in size over several months. She did not complain of any compressive or infective symptoms. A computed tomography scan of the neck showed ectopic thyroid at the lingual area, thyroglossal cyst at the hyoid level, posterior to the thyroglossal cyst, and left supraclavicular locations. Fine needle aspiration for cytology of the left supraclavicular swelling was reported as papillary thyroid carcinoma. Subsequent thyroid scintigraphy further confirmed the presence of ectopic thyroid tissue or foci of metastasis. Pre-surgery blood investigation showed Free T4 of 13.4 pmol/L (11-22), TSH of 4.042 mIU/l, unstimulated thyroglobulin of >300 mcg/L (2—50 mcg/L), and negative anti-thyroglobulin. The patient underwent bilateral neck dissection, Sistrunk procedure, and ablation of the base of the neck. Histopathology showed ectopic thyroid tissue with papillary thyroid carcinoma from the Sistrunk specimen and bilateral lymph node metastases. Thereafter, she underwent radioiodine ablative therapy with 100 mCI of Iodine-131. Serial whole-body scans showed physiologic findings. Currently, she is on TSH suppression therapy and close monitoring for tumor recurrence.

CONCLUSION

This case is a reminder of the embryological journey of thyroid tissue, defects of which can lead to its ectopic location. In spite of its rarity, thyroid carcinoma can occur in ectopic thyroid tissue.

PA-A-07

MANAGEMENT CHALLENGES PRIOR TO SUCCESSFUL TOTAL THYROIDECTOMY IN A PATIENT WITH REFRACTORY GRAVES' DISEASE

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INTRODUCTION

Graves' disease is the most common cause of thyrotoxicosis. Restoration of euthyroidism is vital to prevent further complications including cardiac impairment. Refractory Graves' disease is uncommon and, thus, poses a challenge in preparing a patient for definitive therapy. We describe a case of refractory Graves' disease who successfully underwent definitive surgical therapy.

CASE

A 25-year-old female with a seven-month history of Graves' disease was referred for recurrent syncope due to multifocal atrial tachycardia. She had multiple previous admissions for severe thyrotoxicosis within the last five months where she was treated with thionamides and multiple five-to-seven-day courses of Lugol's iodine each time. On admission, thyroid functions tests showed free T4 (fT4) of 92.5 pmol/L (normal range: 11.5 - 22.7) and TSH of <0.01 mIU/L (normal range: 0.55-4.78). The thyroid ultrasound revealed diffuse enlargement of both thyroid lobes with increased vascularity. She was treated with carbimazole up to 80 mg/day, however, fT4 remained at a range of 77.9 – 90.1 pmol/L. Additional therapy with lithium carbonate (1200 mg/day), dexamethasone (8 mg/day) and cholestyramine resin (2 g twice a day) failed to normalize the fT4 level. Switching carbimazole to propylthiouracil (900 mg/day) also did not prove successful. Plasmapheresis was initiated which near-normalized her fT4 after 11 cycles. Tachyarrhythmias were controlled with carvedilol 25 mg twice a day, verapamil 80 mg thrice a day and ivabradine 7.5 mg twice a day. She underwent a successful semi-urgent total thyroidectomy and was eventually discharged after seven days post-operatively with levothyroxine replacement, calcitriol and calcium supplementation.