analysis also identified an abnormal population of medium to large B cells expressing bright CD20, CD19, CD38, CD45 without CD10, CD5, CD23 or overt kappa or lambda expression. His calcium levels improved with hydration and steroids. Chemotherapy was later initiated.
Conclusion
Primary adrenal lymphoma is rare and aggressive type of NHL. While adrenal insufficiency is expected in this clinical scenario, hypercalcemia from 1,25-$(OH)_2$-D excess is a relatively uncommon presentation. Adrenal insufficiency should be ruled out in bilateral infiltrative adrenal masses. Likely etiologies for hypercalcemia in our case appeared to be secondary to elevated 1,25-$(OH)_2$-D production, humoral hypercalcemia of malignancy and worsened by untreated clinically evident adrenal insufficiency.
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Diabetes Mellitus and Glucose Metabolism

TYPE 2 DIABETES MELLITUS

Type Two Diabetes Patient in Remission After Twelve Years of Diagnosis

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SUN-682

Case study: Type Two Diabetes Patient in Remission After Twelve Years of Diagnosis
Introduction
Type 2 diabetes (T2D) has been defined as a lifelong condition which is inevitably progressive.[1] The idea that beta cell function certainly declines with time in diabetic people who have developed T2D has been definitively disproven.[2] It has been recognised that the processes that cause T2D can be reversed and T2D remission can be achieved.[2]
Many studies show that, by changing life style dramatically, controlling diabetes can improve significantly and a significant proportion of patients can also reduce or come off their glucose-lowering therapies.[3] This has been formally proven in DIRECT, with clear evidence of gradual continuing improvement in beta cell functional capacity over at least 12 months.[4] Remission was linked to weight loss, as two third of those who lost more than 10kg were in remission after two years.[4]
Methods
A case study was done on a 66 years old male, who is diabetic for the last 12 years, with other comorbidities: hypertension and hypercholesterolemia.
He presented with Hemoglobin A1C (HbA1c) of 7.4% with BMI of 37.7 kg/m2 on four oral hypoglycaemic agents and basal insulin of 20 units per day.
His treatment was changed by adding Glucagon-like peptide-1 receptor agonists (GLP-1 RA) for better glycemic control and weight reduction in a setting of a multidisciplinary team approach, including endocrinologist, diabetes educator, dietitian and physical trainer.
Results
Over the last one year and two months, patient was able to stop all his diabetes medication including GLP-1 RA. Over three years follow ups patient achieved weight reduction of 17.3% with HbA1c of 6.5% and additional other metabolic factor benefits.
Conclusion
Even with 12 years of diabetes, reversibility of T2D can still be achieved with weight reduction of over 15%. We will wait for another 10 months to reconfirm our data for two years remission.
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Diabetes Mellitus and Glucose Metabolism

CLINICAL AND TRANSLATIONAL STUDIES IN DIABETES

The Effects of DPP IV Inhibitor on Glycemic Variability in Type 2 Diabetic Patients Treated with Twice Daily Premixed Human Insulin.

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MON-653

The effects of DPP IV Inhibitor on glycemic variability in type 2 diabetic patients treated with twice daily premixed human insulin.
Abstract
Glycemic variability (GV) is emerging as an exciting therapeutic target for diabetes mellitus (DM) with recent evidences showing association of GV with hypoglycemia risk as well as chronic complications.(1,2) Twice daily human premixed insulin is commonly used in developing countries and Asia for treatment of type 2 DM (T2DM). (3)

While more convenient and cost saving, human premixed insulin regime may increase GV due to lesser flexibility and less physiological pharmacokinetic profile. Dipeptidyl peptidase IV inhibitors (DPPIV-I) have been shown to improve GV when used for treatment of T2DM but the effects of DPPIV-I when added on human premixed insulin is limited. We therefore evaluated the changes in GV following addition of DPP IV-I among T2DM patients treated with premixed human insulin with or without metformin therapy. This was a prospective study involving adult patients with T2DM on stable doses of premixed human insulin with or without metformin for at least 3 months from two state hospitals in Malaysia. Blinded continuous glucose monitoring (CGM) were performed at baseline and following 6 weeks of adding Vildagliptin to their insulin regime. A total of 12 patients were recruited (50% male). Mean (SD) age was 55.8 (13) years with mean duration of disease of 14 (6.6) years. The addition of Vildagliptin significantly reduced GV indexes including SD 2.98 (1.17) to 2.33 (0.82), p=0.017; MAGE 6.94 (2.61) to 5.72 (1.87), p=0.018; MAG 1.60 (0.76) to 1.23 (0.48), p=0.009 and M Value 13.96 (13.01) to 6.52 (7.45), p=0.037. In addition there were improvements in terms of parameters for glycemic control. Time spent in optimal glycemic range (4-8 mmol/l) improved from 38.33 (19.69) to 58.17 (5.95) %, p=0.001 with reduction in AUC for hyperglycemia from 2.09 (1.73) to 1.06 (1.09) mmol/day, p=0.010. Hypoglycemia events were infrequent and the reduction in time spent in hypoglycemia [5.92(9.74) to 1.91 (2.54)%, p=0.191] as well as AUC for hypoglycemia [0.03(0.54) to 0.01(0.02) mmol/day, p=0.163] were found although these did not reach statistical significance. We concluded that addition of DPP IV-I to commonly prescribed twice daily premixed human insulin regime in patients with T2DM may improve GV and glycemic control and warrant further exploration.

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Diabetes Mellitus and Glucose Metabolism

TYPE 1 DIABETES MELLITUS

Fluctuating Blood Glucose in an Infant with Newly Diagnosed IPEX Syndrome

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SAT-664

Background: In the IPEX (immune dysregulation, polyendocrinopathy, enteropathy, X-linked) syndrome, Type 1 diabetes mellitus is the most common endocrine complication and usually occurs with a variable presentation from immediately at birth to within the first few months of life.

Clinical case: A four-month-old male presented for evaluation of failure to thrive, eczema, and diarrhea. In the ED, his glucose value was 246 mg/dL with beta-hydroxybutyrate of 0.29 mmol/L (0.00-0.30). Within eight hours and without insulin, he became hypoglycemic and required dextrose-containing fluids to maintain euglycemia; he was quickly made NPO and started on TPN due to excessive stool output. For nearly two weeks he required no insulin while receiving 84g of dextrose per day (21 g/kg/day) in TPN. He developed bloody stools on the day that he started receiving Tacrolimus and IVIG and required transfer to the ICU, and an insulin need of 1 unit/kg/day developed with this worsening of his systemic illness. After the bloody stools resolved, immunosuppression with Rituximab was initiated. Once bowel function improved, Pedialyte and formula were slowly reintroduced and for three weeks his insulin requirement varied from 0.2-0.4 units/kg/day. In his seventh week of hospitalization his insulin was discontinued due to hypoglycemia, and at the time of discharge he had been without insulin for ten days on ad lib formula feeding.

Hemoglobin A1c on admission was 10.2%, and repeat was 10.3%. A fructosamine level was obtained to evaluate the discrepancy between the initial HgbA1c and being euglycemic. It was 269 umol/L (190-270), equivalent to an approximate HgbA1c of 6.5%, suggesting that hyperglycemia resulting in an elevated HgbA1c occurred early in his life and had improved in the days to weeks prior to admission. Further testing revealed an elevated GAD-65 antibody of >250 IU/mL (<5) but normal ICA 512 and insulin autoantibody.

His clinical picture was consistent with IPEX syndrome, confirmed with rapid whole genome sequencing showed a pathogenic hemizygous c.1010G>A p.Arg337Gln variant in the FOXP3 gene.

A HgbA1c performed prior to discharge, eight weeks after the initial, was 6.6%. This spontaneous resolution of hyperglycemia in IPEX, with insulin needs developing only when he had worsening systemic illness as demonstrated by bloody stools, has yet to be described.

Conclusion: Hyperglycemia fluctuated in the first few months of life in a patient with IPEX syndrome, likely related to severity of systemic illness and control of enteropathy.

Adipose Tissue, Appetite, and Obesity

RARE CAUSES AND CONDITIONS OF OBESITY: PRADER WILLI SYNDROME, LIPODYSTROPHY

Phenotypic Study of Meso-Somatous (Roch-Leri) Lipomatosis

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SUN-598

Background: Lipomatosis is a condition in which multiple *lipomas* are present on the body. Different entities which are accompanied by multiple lipomas include Proteus syndrome, Cowden syndrome and related disorders due to PTEN gene mutations, MEN1, benign symmetric lipomatosis (Madelung or Launois-Bensaude disease),