

#### **METHODOLOGY**

This is a cross-sectional cohort study among participants of the Weight Loss Journey Program in Hospital Sultan Abdul Aziz Shah, University Putra Malaysia in March 2023. Overweight is defined as BMI  $\geq$ 23.0 kg/m² and obese is defined as BMI  $\geq$ 27.5 kg/m². Participants who agreed to do baseline blood exams were investigated for thyroid abnormalities.

#### **RESULT**

There were 151 participants in the weight loss challenge. The a mean age was 33 years old and majority were female (n = 124). The mean weight 80.9 kg (51.1-158.1 kg) with mean BMI of 31.6 kg/m² (23.0 – 57.5 kg/m²). A total of 72 participants consented to blood exam for serum thyroid stimulating hormone (TSH) and free thyroxine (T4) levels. The mean TSH was 1.39 uIU/mL (0.2- 3.49 uIU/mL), while the mean fT4 was 13.04 pmol/L (10.6-17.1 pmol/L). There were no participants with subclinical nor overt hypothyroidism. Paradoxically, there was a patient who had subclinical hyperthyroidism with TSH and T4 values of 0.2 uIU/mL and 15.5 pmol/L, respectively.

#### **CONCLUSION**

Subclinical or overt hypothyroidism did not seem to be an important cause of obesity locally. Hence, we recommend that thyroid function test only be required for those who have additional clinical features of thyroid disorder.

## **EP\_A030**

# THE PREVALENCE OF PRE-DIABETES AND DIABETES AMONG OVERWEIGHT AND OBESE PATIENTS IN A SINGLE-CENTRE

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#### INTRODUCTION

Overweight and obesity increase the risk of diabetes mellitus, and 84% of Malaysians with Type 2 Diabetes Mellitus (T2DM) are obese. While the local prevalence of prediabetes and diabetes are 11.62% and 18.3% respectively, there is paucity of data on its prevalence among those who are overweight and obese.

#### **METHODOLOGY**

This is a cross-sectional cohort study among participants of the Weight Loss Journey Program in Hospital Sultan Abdul Aziz Shah, University Putra Malaysia in March 2023. Overweight is defined as BMI ≥23.0 kg/m² and obese

is defined as BMI ≥27.5 kg/m². Participants who agreed to do baseline blood exams were investigated for prediabetes and diabetes by measuring their baseline fasting blood glucose (FBS) and HbA1c.

#### **RESULT**

There were 151 participants in the weight loss challenge. The mean age was 33 years old and majority were female (n=124). Mean weight was 80.9 kg (51.1 – 158.1 kg) with mean BMI of 31.6 kg/m² (23.0- 57.5 kg/m²). Six patients were excluded as they were known to have DM. A total of 68 participants agreed to undergo screening for diabetes by measuring FBS and HbA1c. The mean FBS and HbA1c were 4.66 mmol/L (3.8- 5.9 mmol/L) and 5.5% (4.5-6.5%), respectively. Interestingly, 39.7% (27 out of 68 subjects) had prediabetes, and only 6% (4 out of 68 subjects) met the criteria for diabetes.

#### CONCLUSION

Higher than normal BMI appear to pose a 3.3-fold increased risk of prediabetes compared to the general population. This is worrying given their relatively young age and only moderately high BMI levels. Nevertheless, the noted small proportion of undiagnosed DM in this patient population may reflect recent improvements in screening and detection of DM.

### **EP A031**

# LOCAL EXPERIENCE OF TOLVAPTAN IN THE MANAGEMENT OF INPATIENTS WITH SIADH

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#### INTRODUCTION

Hyponatraemia with sodium (Na) levels of less than 135 mmol/L is the most common electrolyte imbalance in clinical practice. Syndrome of inappropriate antidiuretic hormone secretion (SIADH) is a frequent cause of hyponatraemia, especially in patients with malignancy and can result in prolonged hospitalisation. Tolvaptan, an ADH-receptor antagonist, is a useful option to treat hyponatraemia in patients with SIADH and reduce inpatient stay. We developed a local treatment protocol in 2019 for the use of Tolvaptan in Hospital Putrajaya (HPJ).

#### **METHODOLOGY**

This was retrospective study of inpatient use of tolvaptan in the treatment of SIADH-related hyponatremia in HPJ from January 2020 to March 2023. The criteria for inpatient tolvaptan use were according to the HPJ tolvaptan local guideline.