CONCLUSION
Tocovid at 200 mg twice a day significantly improved median and sural sensory nerve CV at 12 months but improvement in tibial motor nerve CV was only observed up to six months. All improvements diminished after six months of washout.

PP-19

ANDROGEN PRODUCING TUMOUR: UTILISING OVARIAN AND ADRENAL VENOUS SAMPLING

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INTRODUCTION
Androgen-secreting tumour (AST) is rare, with a prevalence of 0.2% among women with hirsutism. Ovarian and adrenal venous sampling (OAVS) is useful in localising the tumour but has low success rate. We reported a case of ovarian AST with successful cannulation of all 4 veins.

RESULTS
A 26-year-old woman presented with secondary amenorrhoea, hirsutism and voice deepening for 5 years. She did not have Cushing syndrome, or manifestations related to hyperprolactinemia or congenital adrenal hyperplasia. Her family history was unremarkable. On examination, blood pressure was 112/75 mmHg, heart rate 82/min, weight 73 kg, and BMI 25.8 kg/m^2. She has a feminine body habitus with Ferriman-Gallwey score of 17. She has no clitoromegaly. Serum testosterone was 14x the upper limit of normal at 28.87 nmol/L. The following serum hormonal tests were all within normal: TSH 1.194 mU/L, fT4 12.0 pmol/L (7-14.4), prolactin 310 µU/mL, LH 5.8 mU/mL, FSH 6.8 mU/mL, oestradiol 247 pmol/L, Dehydroepiandrostenedione-sulphate (DHEAS) 5.9 µmol/L. Free androgen index was 48 (4x ULN for female). AST of the ovary was suspected. MRI of the adrenal glands and pelvis revealed a heterogeneous enhancement of the left ovary, slightly larger than the right, and normal adrenal glands. All 4 veins were successfully cannulated during OAVS. The increased testosterone secretion was lateralised to the left ovary, consistent with the MRI, with lateralization ratio of 7.9 and 4.4.

DISCUSSION
A very high testosterone level should raise suspicion of AST. Testosterone >3 nmol/L has a sensitivity of 100% and specificity of 53% in detecting AST. Some reported values >5.2 nmol/L with convincing history. DHEAS level of >18.9 mmol/L strongly suggests adrenal origin. OAVS is useful in cases of small ovarian AST that could not be excluded from biochemical and imaging studies. However, it is a difficult and highly demanding procedure. A central-to-peripheral oestradiol ratio of >2 confirms successful ovarian vein catheterisation. An ovarian vein testosterone gradient of >1.44 confirms lateralization (1).

CONCLUSION
A very high serum testosterone should raise suspicion of AST. OAVS, although difficult, is useful in localising the tumour.

PP-20

PRIMARY HYPOPHYSITIS WITH HYPOPITUITARISM IMPROVING WITH HIGH DOSE STEROIDS

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INTRODUCTION
A 39-year-old female presented with an 8-month history of severe headaches, amenorrhea for 6 months, increased thirst and weight loss. She consulted a neurologist for migraine and was subsequently referred to an endocrinologist when her MRI showed a pituitary lesion. There was no visual impairment.

RESULTS
Investigations on admission:
Free T4 11.7 pmol/L (11.5-22.7)
TSH 0.11 mIU/L (0.55-4.78)
IGF-1 267 ng/ml (63.4-223)
ACTH <5 pg/ml
AM cortisol <14 nmol/L
LH <0.1IU/L(0.5-16.9)
FSH 2.8IU/L (1.5-9.1)
Estradiol 75 pmol/L (205-786)
Prolactin 511 mIU/L (59-619)

MRI of the pituitary gland showed a clearly thickened pituitary stalk abutting the optic chiasm with heterogeneous enhancement along the stalk and base of the hypothalamus and loss of posterior bright spot. The pituitary enhances peripherally with a slight hyperintensity on T1-weighted images, signifying proteinaceous or inflammatory changes. There was no dural tail sign. She was diagnosed with hypophysitis and was started on IV methylprednisolone 500 mg OD for 3 days. She developed overt polyuria after initiation of steroids and required regular desmopressin. As she is young with hypopituitarism and diabetes insipidus, she was given prednisolone 50 mg OD as per the protocol from Chiloco et al from Rome with a tapering dose planned over 13 months. In the study by Chiloco et al, this regime showed a 50-70% improvement in hormonal deficiencies compared to conservative treatment. This patient had resumption of her menses after 3 months despite still requiring regular desmopressin. There was improvement in her pituitary function with FT4 16.1 pmol/L, TSH 0.55mIU/L, LH 2IU/L, FSH 2.2IU/L and estradiol 193 pmol/L. Repeat MRI showed marked reduction in her stalk thickening.

CONCLUSION

High dose and prolonged steroids are an effective treatment to improve hormonal outcome in a patient with primary hypophysitis.

PP-21

RETROSPECTIVE ANALYSIS OF ADRENAL VEIN SAMPLING (AVS) SUCCESS: A STUDY OF A MALAYSIAN COHORT FROM A SINGLE TERTIARY CENTER

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INTRODUCTION

Adrenal venous sampling (AVS) is the current gold standard to properly lateralise primary aldosteronism (PA) caused by an adrenal lesion. A successful AVS can help to identify unilateral PA giving the option of an adrenalectomy of the affected adrenal as a one-off treatment instead of life-long medication. However, due to the invasive nature of the technique and the difficulty in identifying, cannulating, and withdrawing blood from the adrenal vein, AVS is not always successful. Herein, we aim to elucidate the clinical and laboratory characteristics associated with successful AVS in patients with PA.

METHODOLOGY

100 AVS procedures conducted at Hospital Universiti Kebangsaan Malaysia (HUKM), Kuala Lumpur, Malaysia between 2017 and 2020 were analysed retrospectively. Success of AVS, sociodemography, and blood results of the patients pre-adrenalectomy were collected and compared. The variables investigated were age, gender, race, duration of hypertension, body mass index, aldosterone, serum sodium, serum potassium, and hypokalemia.

RESULTS

Of the 100 AVS procedures studied, 54 were performed on men and 46 were on women. Malay patients presented the highest frequency of patients (n=53) followed by Chinese (n=47). AVS was most frequently performed in patients aged 36-45 years (n=38) followed by 26-35 years (n=20), 56-65 years (n=16), 46-55 years (n=15), 66-75 years (6 patients), 16-25 years (4 patients) and 76-85 years (1 patient). AVS was successful in sixty-three patients, but was unsuccessful in thirty seven patients. Variables significantly associated with successful AVS were Malay ethnicity (p=0.048) and high serum sodium levels (p=0.019).

CONCLUSION

Successful AVS in patients with PA was most significantly associated with Malay ethnicity and high serum sodium. There were no significant associations found for age, gender, duration of hypertension, body mass index, aldosterone, and potassium levels.

PP-22

LYMPHOCYTIC HYPOPHYSITIS MASQUERADING AS PITUITARY MACROADENOMA WITH SUPRASELLAR EXTENSION

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INTRODUCTION

Autoimmune hypophysitis mimics the more common non-secreting pituitary adenomas. The diagnosis can only be confirmed with certainty only through histology examination of the pituitary gland. Studies have shown up to 40% of patients with hypophysitis are misdiagnosed as having pituitary macroadenoma and undergo unnecessary surgery.