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 lifelong 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.

#### **RESULTS**

A man suffered from daily headache, nausea, lethargy, loss of weight and blurred vision for one year. He was thirsty all the time and drank eight liters of fluid in a day with bothersome nocturia. He was intolerant of cold weather and had constipation and noticed dry skin. His libido was low. His progressive reduction in effort tolerance resulted in him unable to continue working. On examination, he was of medium built with bradycardia and dry skin. Visual confrontation revealed bitemporal hemianopia. Laboratory investigations revealed central hypothyroidism, hypogonadotropic hypogonadism, central hypocortisolism and a compensated cranial diabetes insipidus. Imaging revealed a heterogeneously enhancing mass in the sella measuring 19 x 12 x 12 mm with suprasellar extension causing mass effect into the optic chiasm. The pituitary stalk was not visualized. Hormonal replacement was commenced. He underwent trans-sphenoidal surgery and histopathology showed chronic hypophysitis. He was then pulsed with steroid and had clinical improvement.

#### **CONCLUSION**

Differentiating autoimmune hypophysitis from nonsecreting pituitary adenoma before surgery would greatly benefit the patient. It avoids the possible complications of surgery. Furthermore, autoimmune hypophysitis can be successfully treated with medications. Another important learning point from this case is to highly suspect hypophysitis in a patient who has cranial diabetes insipidus even before any pituitary surgery.

## **PP-23**

# EMPTY SELLA SYNDROME WITH ECTOPIC GROWTH HORMONE SECRETION – AN UNUSUAL PRESENTATION OF ACROMEGALY

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# INTRODUCTION

Empty sella syndrome is a radiological diagnosis characterised either by primary of secondary causes. Individuals with empty sella syndrome do not have any associated symptoms, but some may exhibit features suggestive of hypopituitarism. We report a case of a female with symptoms of florid growth hormone excess with radiological evidence of empty sella syndrome.

#### **RESULTS**

A 59-year-old Malay female was initially referred for poorly controlled diabetes with HBA1c of 12.5% requiring very high doses of insulin. On further history, she claimed that her ring size increased from size 20 at the time she got married to size 25 along with increased shoe size from 7 to size 10 in a span of 6 years. On clinical examination, she had typical features of acromegaly. Formal Bjerrum testing showed normal visual fields. IGF-1 level was elevated at 655ug/L (97-292). Her other anterior pituitary hormonal tests were normal. Her growth hormone (GH) was not suppressed following an oral glucose load (OGTT). Brain MRI revealed non-visualisation of normal pituitary gland with CSF filled sella turcica suggestive of empty sella syndrome. A contrast-enhanced computed tomography revealed a soft tissue density seen at the right lateral aspect of the pituitary fossa which is most likely arising from the sella turcica. She was then referred to neurosurgery.

#### CONCLUSION

We described a patient with clinically and biochemically proven acromegaly with an empty sella syndrome on MRI. Early screening and detection would be imperative for earlier neurosurgical referral for better outcome.

## **PP-24**

# APOPLECTIC CORTICOTROPIN-PRODUCING MACROADENOMA: A RARE ENTITY

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#### INTRODUCTION

Pituitary tumour apoplexy is defined as infarction, haemorrhage or combination of both occurring in a pituitary tumour as a result of expansion of the tumour causing altered sensorium, visual and ophthalmic disturbances and hormonal deficiencies. It is uncommon and mostly happens in macroadenomas. The prevalence of apoplexy is extremely rare in corticotropin-producing adenoma.