

## PP-73

### A Case of Refractory Bradycardia Secondary to Baroreflex Failure in a Patient with Suprasellar Germinoma

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#### INTRODUCTION

Germinoma in the fourth ventricle is an extremely rare occurrence and it has not been reported in association with baroreflex failure.

#### CASE

We report a 21-year-old man who presented with polyuria and polydipsia associated with gradual weight loss, headache and postural giddiness for 8 months. Physical examination revealed a blood pressure of 72/42 mmHg and a pulse rate of 42 beats per minute. Neurological examination revealed cranial nerves VI, IX and X palsies. His sodium was 150 mmol/L, serum osmolarity 333 mosm/kg and urine osmolarity 217 mosm/kg. MRI brain revealed a large suprasellar mass measuring 5.6 x 5.6 x 5.0 cm extending into the sellar with enhanced lesions at the ependymal lining of the fourth ventricle. The diagnosis of panhypopituitarism with cranial diabetes insipidus was made. Intravenous hydrocortisone, oral desmopressin and levothyroxine were administered and a biopsy confirmed the suspicion of germinoma. Despite inotropic support, he remained bradycardic. Attempts to increase his heart rate and normalise his blood pressure with fludrocortisone, oral salt, temporary pacemaker and octreotide were futile. The inotropic support was finally withdrawn with the introduction of oral methylphenidate which is a central nervous system stimulant and peripheral vasoconstrictor. The patient subsequently underwent adjuvant chemotherapy and radiotherapy.

Intact baroreflex function is required for appropriate cholinergic and adrenergic influence on heart rate and blood pressure. Input from the carotid sinus is delivered to the nucleus tractus solitarius located near the fourth ventricle via the glossopharyngeal nerve which then sends signals to the heart and blood vessels via sympathetic and parasympathetic nerve fibres.

#### CONCLUSION

Baroreflex failure should be suspected in patients with suprasellar or sellar tumours with fourth ventricle

involvement who present with severe bradycardia and hypotension despite being adequately replaced with hydrocortisone and thyroxine. The use of methylphenidate should be considered when there's failure of other treatment options.

## PP-74

### A Rare Case of Contralateral Recurrence of an Aldosterone-producing Adenoma

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#### INTRODUCTION

Primary aldosteronism is commonly caused by unilateral aldosterone producing adenoma (APA) or bilateral idiopathic hyperaldosteronism. Laparoscopic adrenalectomy for unilateral disease is usually curable and is the treatment of choice. Recurrent APA after an adrenalectomy on the same side is extremely rare. Contralateral recurrence of an aldosterone-producing adenoma (APA) in a previously normal adrenal gland after the initial adrenalectomy is also exceedingly rare.

#### CASE

We report a 31-year-old Malay male who first presented in 2009 with hypertension, hypokalemia and metabolic alkalosis. Investigation for hypertension in the young revealed primary aldosteronism (elevated aldosterone renin ratio, ARR and a nonsuppressible aldosterone on confirmatory testing). CT scan of the adrenal glands revealed a right adrenal adenoma measuring 1.9 cm x 0.9 cm with a normal left adrenal. He was diagnosed with Conn's syndrome and underwent laparoscopic right adrenalectomy. HPE of the right adrenal was consistent with adrenocortical adenoma. Post operatively, hypokalemia resolved and he was discharged with only a single antihypertensive agent. He subsequently defaulted his medication and was lost to follow up. He presented 8 years later in 2017 with hypertensive intracranial bleed.

He was again found to have hypokalemia with metabolic alkalosis and investigations revealed recurrent primary aldosteronism. CT adrenals showed left adrenal adenoma measuring 1.3 cm x 1.2 cm. A lesion was also seen at the previous right adrenalectomy site adjacent to the surgical clips. Possibility of recurrent disease on the right side or contralateral left APA was entertained. We proceeded with adrenal vein sampling (AVS) which confirmed a left APA.

#### CONCLUSION

He was started on spironolactone and his BP is currently well controlled with normal potassium levels.