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Ganglioneuroma of the Adrenal Gland
- A Case Report -

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Introduction

Adrenal ganglioneuromas are rare, benign and well differentiated tumors that arise from neural crest tissue. Most patients with an adrenal ganglioneuroma are asymptomatic, and most of these tumors are non-secreting. They are usually incidentally found on abdominal imaging study.

Case Report

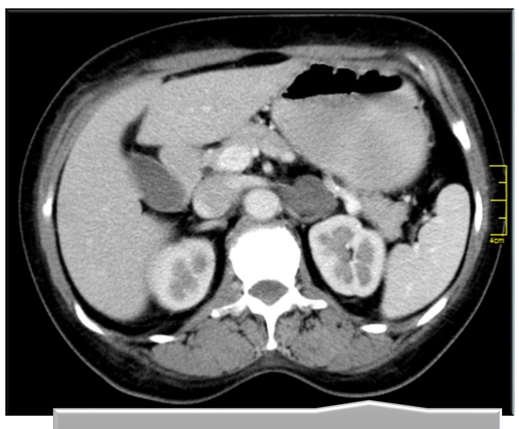
We present a case of a 53-years-old female, with history of arterial hypertension diagnosed at age 30, dyslipidaemia, depressive disorder and hysterectomy for uterine prolapse.
Medicated with spironolactone, potassium, atorvastatin, omeprazole, fluoxetine and lorazepam.

She had repeated hospitalizations in an Internal Medicine Service for recurrent hypokalaemia.
During investigation of hypertension and hypokalaemia, a hypodense nodule was found on abdominal CT in her left adrenal gland.
She was referred to our service of Endocrinology due to suspicion of primary aldosteronism.
Clinically, asthenia, anorexia, cramps and muscle aches with a few months of evolution. No significant finding on physical examination.

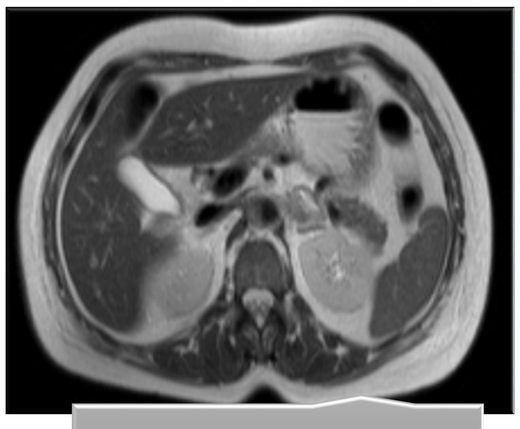
	Results (*)	N
Aldosterone (ng/dL)	13,52	4 – 31
Renin (µUI/mL)	23,8	Supine: 2,8 – 39,9 Ortostatic: 4,4 – 46,1
Aldosterone/Renin Ratio [(ng/dL)/(ng/mL/hr)]	4,66	< 20
Potassium (mmol/L)	4,2	3,5 – 5,1
Plasma metanephrines (nmol/L) Metanephrine Normetanephrine	 0,31 0,11	 <0,46 <1,09
Urinary fractionated catecholamines (24hr urine)(µg/24hr) Adrenaline Noradrenaline Dopamine	 6,16 24,19 297,15	 0,01-19,96 15,06-80,03 64,93-400,0
Urinary fractionated metanephrines (24hr urine)(µg/24hr) Total metanephrines Metanephrine Normetanephrine	 183,27 71,80 112,19	 179,0-651,0 74,0-297,0 105,0-354,0

Note(*): Determinations with replacement of spironolactone by verapamil

1. Adrenal functional study

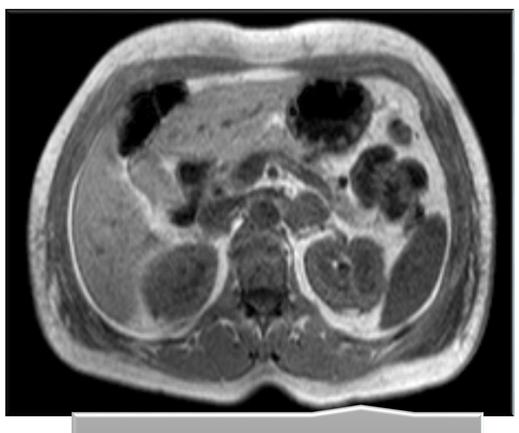


2. Adrenal CT

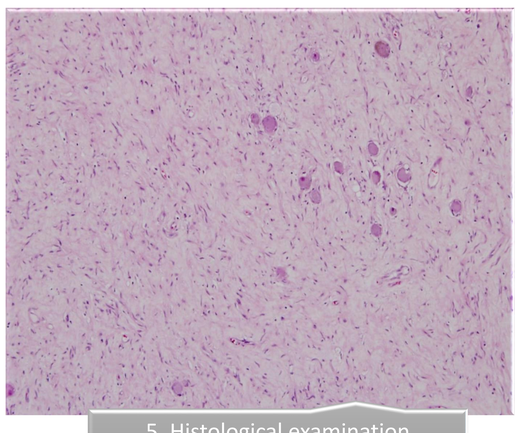


3. T2-weighted MRI upper abdomen

Adrenal CT showed a 3 cm hypodense nodule in her left adrenal gland. (image 2)
Abdominal-pelvic MRI revealed a complex cystic mass with thick walls, with a 11x7 mm mural nodule, being questioned the possibility of tumor or pseudocyst degeneration, and suggesting consideration of its surgical excision. (image 3 and 4)
Laboratory endocrine tests were normal. (image 1)



4. T1-weighted MRI upper abdomen



5. Histological examination
(hematoxylin and eosin staining; magnification 400x)

A laparoscopic left adrenalectomy was performed.
Histological diagnosis revealed an adrenal ganglioneuroma. (image 5)

Nephrology consultation for investigation of hypokalemia excluded a potassium-losing renal interstitial disease.
Currently, she attends Psychiatric consultation because of suspicion of Munchausen syndrome.

Conclusion

We present this case due to the rarity of the clinical entity and the clinical presentation, which initially pointed us to another diagnosis. Ganglioneuroma are generally non-secreting tumors, and most patients are asymptomatic at diagnosis, as it is in the case presented. Prognosis of patients who underwent complete tumor resection is excellent.

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