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Clinical Image
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Papilledema in Patient with Primary Aldosteronism: an Unusual Case Report

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Clinical Image

Primary Aldosteronism (PA) is the most frequent form of secondary hypertension [1]. Target treatment is important to reduce the risk of cardiovascular complications. Visual field defects and papilledema are reported in PA patients [2-3].

We report a case of patient with papilledema and PA. A 50-years old woman referred to our Specialized Unit with history of hypertension, recurrent hypokalemia, headache and papilledema. The combination of hypokalemia, metabolic alkalosis with hypertension raised the suspicious of inappropriate mineral corticoids secretion. Plasma renin activity was suppressed (0.3 ng/ml/h, nv 0.5 to 2.5) with an increase of Plasma Aldosterone (PAC) (38.3 ng/dl, nv<15) and urinary aldosterone concentrations (39 µg/24h, nv<30); Renin-Aldosterone Ratio (ARR) was high (127 ng/dl:ng/dl/h, nv<30) suggesting an Aldosterone-Producing Adenoma (APA). CT scan showed a nodule (28 mm × 21 mm × 21 mm) in the left adrenal gland (Figure 1). Adrenal venous sampling was performed: PAC in the left and right adrenal veins was 26 ng/dl and 22 ng/dl, respectively. 131I-19-norcholesterol scintigraphy demonstrated over-intake in the right adrenal gland. Right adrenalectomy was performed and histologic examination confirmed APA diagnosis. After five months the patient was asymptomatic; the laboratory analysis and BP were normalized and at the retinal angiography the papilledema was disappeared (Figure 2).

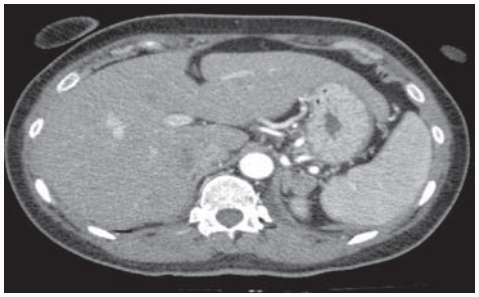

Figure 1: CT scan showing the tumor (3 cm) in the left adrenal gland.

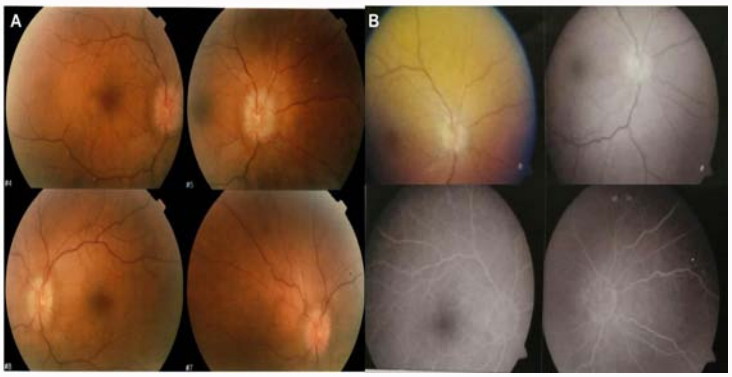

Figure 2: (A) Retinal angiography at onset of symptoms; (B) Retinal angiography performed six months after adrenalectomy.

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Conclusion

We present an unusual case of PA due to adrenal adenoma presenting with a papilledema. The prompt diagnosis and specific surgical treatment restored mineral corticoid hormone values and BP associated to disappearance of the papilledema.

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