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54 - CUSHING'S SYNDROME WITH SEVERE HYPOKALAEMIA AND SUBTLE SIGNS: A CASE REPORT AND INTEGRATIVE REVIEW OF PATHOPHYSIOLOGICAL AND DIAGNOSTIC ASPECTS

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Resumen

Cushing's disease, the main cause of ACTH-dependent Cushing's disease, is due to pituitary adenoma. Its diagnosis remains a clinical challenge due to phenotypic variability, overlap with prevalent comorbidities and the possibility of discordant diagnostic test results. An integrative review of its diagnostic and therapeutic approach, crucial for up-to-date and effective management, is presented in this case report. The patient is a 68-year-old woman with a history of hypertension and recently diagnosed type 2 diabetes mellitus, who comes to the emergency department for symptomatic hyperglycaemia. During her stay, severe hypokalaemia and persistent metabolic alkalosis were detected, leading to hospital admission. The initial study ruled out hyperaldosteronism and revealed severe hypercortisolism (plasma cortisol > 58 ?g/dl, CLU > 3,000 ?g/24 h, ACTH > 190 pg/ml). The patient had a clinical phenotype compatible with hypercortisolism: capillary fragility, proximal muscle weakness, spontaneous haematomas, alopecia and mild cognitive impairment. Dynamic tests (desmopressin and high dose dexamethasone suppression) pointed to pituitary origin. Petrosal sinus catheterization confirmed a significant central/peripheral ACTH gradient, with left lateralization. Pituitary MRI showed a 2-mm hypointense image in the lower left paramedian location. Medical treatment with metopirone was started previous to surgery with good biochemical response. Management included multidisciplinary intervention and treatment of comorbidities (diabetes, hypokalaemia, hypertension). Pituitary surgery was scheduled as definitive treatment. This case highlights the importance of the sequential diagnostic approach, the fundamental role of petrosal sinus catheterization and comprehensive management prior to surgery in patients with pituitary Cushing's disease.