腎上腺機能不足 Adrenal insufficiency 沈峰志 高雄長庚醫院新陳代謝科

Adrenal insufficiency is the decreased production of adrenocortical hormones (glucocorticoids, mineralocorticoids, and adrenal androgens) and can be primary, secondary, or tertiary. Primary adrenal insufficiency (Addison disease) is caused by a disorder of the adrenal glands. The most frequent cause of primary adrenal insufficiency is autoimmune adrenalitis, which may occur sporadically or as a manifestation of polyglandular autoimmune syndromes. Secondary adrenal insufficiency is the result of decreased production of ACTH (adrenocorticotropic hormone) and tertiary adrenal insufficiency is the result of decreased production of CRH (corticotropin-releasing hormone) by the hypothalamus. Patients with long-standing adrenal insufficiency can present with postural hypotension, nausea, vomiting, weight loss, anorexia, lethargy, depression, and/or chronic hyponatremia. Patients can also present with loss of libido as a result of hypoandrogenism. Patients with primary adrenal insufficiency also tend to develop hyperpigmentation of the skin, mild hyperkalemia, and metabolic acidosis. Serum cortisol levels that remain low even after the administration of exogenous ACTH (ACTH stimulation test) confirm the diagnosis of primary adrenal insufficiency. Glucocorticoid replacement therapy is required for all forms of adrenal insufficiency. Adrenal crisis is life-threatening and should be treated immediately with high doses of hydrocortisone and intravenous fluids.