

Adrenal Function Case Studies: 1

A 53 year-old male patient undergoing an annual physical complains of listlessness and fatigue

Na - 138 mmol/L, K - 4.3 mmol/L, CO₂ - 23 mmol/L, TSH- 4.0 μU/mL,

Hb - 13.5 g/dL, 8:00 am serum cortisol - 23 μg/dL

Adrenal Function Case Studies: 2

A 37 year old male patient with AIDS and evidence of systemic opportunistic fungal infection

Na - 125 mmol/L, K - 4.9 mmol/L, CO₂ - 18 mmol/L,

TSH - 0.26 μU/mL,
8:00 am serum cortisol - < 3 μg/dL

Adrenal Function Case Studies: 3

A 37 year old male patient with AIDS and a history of pulmonary opportunistic fungal infection

Na - 136 mmol/L, K - 4.2 mmol/L, CO₂ - 22 mmol/L, TSH - 1.4 μU/mL,

serum cortisol: 8:00 am - 10 μg/dL; 9:00 am after 250 g of cosyntropin - 13 μg/dL, plasma ACTH - 150 pg/mL

Adrenal Function Case Studies: 4

A 30 year old woman with complaints of insomnia, depression, oligomenorrhea and weight gain

Na - 145 mmol/L, K - 3.7 mmol/L, CO₂ - 27 mmol/L, TSH - 3.2 μU/mL, 24h urine free cortisol - 50 μg with a creatinine of 400 mg, repeat urine free cortisol - 150 μg and 900 mg of creatinine, a 2sd repeat: free cortisol - 180 μg and 920 mg of creatinine, overnight dexamethasone suppression test: 8:00 am serum cortisol - 15 μg/dL, midnight serum cortisol - 16 μg/dL

Adrenal Function Case Studies: 5

A 42 year old woman with complaints of insomnia, depression, oligomenorrhea and weight gain

Na - 148 mmol/L, K - 3.5 mmol/L, CO₂ - 30 mmol/L, TSH - 2.1 uU/mL, 24h urine free cortisol - 450 μg with a creatinine of 870 mg, repeat free cortisol - 430 μg overnight dexamethasone suppression test: 8:00 am serum cortisol - 34 μg/dL,

Plasma ACTH - 120 pg/mL, high dose(2mg q 6h x 8) dexamethasone suppression - 2sd day: 24h urine free cortisol - 20 μg

Adrenal Function Case Studies: 6

A 36 year old woman presents with extensive androgen-dependent hirsutism, and signs of severe virilism developing over a period of 3 months

17-hydroxyprogesterone - 600 ng/dL, DHEAS - 4500 μg/dL, FSH - 8 mU/mL, LH - 7 mU/mL, testosterone - 200 ng/dL

Adrenal Function Case Studies: 7

A 17 year old woman with oligomenorrhea, weight gain and hirsutism dating from puberty but no sign of severe virilism.

17-hydroxyprogesterone - 230 ng/dL, DHEAS - 420 μ g/dL, FSH - 5 mU/mL, LH - 15 mU/mL, testosterone - 80 ng/dL, 8:00 am serum cortisol - 23 μ g/dL

Adrenal Function Case Studies: 8

A 47 year old woman who was found to be hypertensive three months previously and started on diuretic therapy presents now with complaints of muscle weakness, polyuria and nocturia.

Na - 148 mmol/L, K - 2.8 mmol/L, urine K - 120 mmol/L, urine volume - 1900 mL/24h, upright plasma renin activity (PRA) - 1.4 ng/mL/h, recumbent plasma aldosterone - 53 ng/dL, upright plasma aldosterone - 50 ng/dL