Resolution of the physical features of Cushing’s syndrome in a patient with a cortisol secreting adrenocortical adenoma after unilateral adrenalectomy

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DESCRIPTION

A 37-year-old woman developed clinical manifestations of Cushing’s syndrome over a span of 2 years. Physical examination revealed features that best describe Cushing’s syndrome, such as wide purple striae (>1 cm) over the abdomen, facial plethora and easy bruisability.1 Other features observed were hypertension, moon facies, acne, a dorsocervical fat pad, central obesity and dyslipidaemia. The diagnosis of hypercortisolism was confirmed using a 1 mg overnight dexamethasone suppression test (19.7 ng/dL, N: <1.8) and 24 h urine free cortisol (185.9 μg/24 h, N: 3.5–45). A suppressed adrenocorticotropic hormone (ACTH) level (4 pg/mL, N: 5–20) and a lack of hyperpigmentation suggested ACTH-independent Cushing’s syndrome.

Figure 1  Physical features of Cushing’s syndrome (top to bottom: moon facies, a dorsocervical fat pad and wide purple striae (>1 cm) over the abdomen) documented before surgery, and at 3 and 6 months after surgery.
Further work up using CT with contrast of the adrenals showed a 2.4×2.3×2.4 cm right adrenal mass. The patient then underwent laparoscopic adrenalectomy of the right adrenal gland. Steroids was started postoperatively and tapered over time. Histopathology results were consistent with an adrenocortical adenoma (2.5 cm widest dimension). Six months after surgery, there was resolution of the physical features, weight loss and improvement in blood pressure.

Figure 1 is a serial photograph of the physical features seen in Cushing’s syndrome, such as moon facies, a dorsocervical fat pad and wide purple striae, taken preoperatively, and at 3 and 6 months after surgery. With treatment, physical and biochemical changes of Cushing’s syndrome both resolve through time. The time course of the resolution of these changes, however, is varied. We observed that the physical features were ameliorated at 3 months and resolved at 6 months.

Learning points
- Physicians as well as patients should be aware that improvement of the features of Cushing’s syndrome after treatment does not occur immediately.
- Dramatic resolution of the physical features of Cushing’s syndrome, however, can be observed as early as 6 months after surgery.

 REFERENCES