

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

John Paul Montinola Quisumbing,<sup>1</sup> Mark Anthony Santiago Sandoval<sup>2</sup>

<sup>1</sup>Section of Endocrinology, Diabetes and Metabolism, Department of Medicine, University of the Philippines Manila, Manila, Metro Manila, Philippines

<sup>2</sup>Section of Endocrinology, Diabetes and Metabolism, Department of Medicine, Philippine General Hospital, University of the Philippines Manila, Manila, Philippines

#### Correspondence to

Dr John Paul Montinola Quisumbing, ipad100183@yahoo.com

Accepted 15 April 2016

#### 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.<sup>1</sup> 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 adrenocorticotrophic hormone (ACTH) level (4 pg/mL, N: 5–20) and a lack of hyperpigmentation suggested ACTH-independent Cushing's syndrome.



Before surgery

At 3 months

At 6 months

**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.



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**To cite:** Quisumbing JPM, Sandoval MAS. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2016-215693

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.<sup>2</sup> The time course of the resolution of these changes, however, is varied.<sup>2,3</sup> We observed that the physical features were ameliorated at 3 months and resolved at 6 months.

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**Contributors** JPMQ worked up the case and wrote the case report. MASS reviewed the case report and critically appraised it. JPMQ incorporated his suggestions.

**Competing interests** None declared.

**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

## 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.

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