Exogenous Cushing’s Syndrome: The Cause Finding Difficulties

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Cushing’s syndrome (CS) is more frequent associated with exogenous sources of glucocorticoids which are usually revealed by patients’ anamnesis or medical records [1]. We present a most unusual case of CS without obvious cause.

40-year female was admitted for progressively weight gain of 30 kilograms (kg) during the last year associated with multiple red striae, androgenic fat mass redistribution, intermittent muscle pain, and secondary amenorrhea [Figure 1,2].

The personal and familial medical history was irrelevant. She denied any ingestion or systemic administration of any drugs since generally she has been in very good health.

The clinic exam revealed a body mass index of 40 kg/square meters (m2) and high blood pressure. The investigations found dyslipidemia, hyperuricemia, hepatic enzymes twice upper the normal limit, low-normal level of blood potassium (3.9 mmol/L, normal ranges between 3.5 and 5.1 mmol/L). CS was suspected and the investigations for adrenal axes were performed. The plasma morning ACTH (Adrenocorticotrope Hormone) and cortisol were extremely low suggesting an exogenous source of glucocorticoids which we could not detect [Table 1].

One evening during hospitalization a nurse saw the patient using a skin cream for all over the body. That was in fact a Clobetasol propionate 0.05% cream. The patient told us that she was using it as a cosmetic product for the last 2 years (once every two to three nights) in order to "avoid dry skin". The administration was stopped and the patient was left under a very low dose of prednisone (2.5 miligrams for the following 3 months) because of adrenal insufficiency risk [2]. Then she used prednisone only in case of hypotension or infections up for the following year. The clinical phenotype persisted for several months with a mild progressive improvement, the menses resumed, and after

Table 1: The suppressed adrenal axes in exogenous Cushing’s disease.

<table>
<thead>
<tr>
<th>Hormone</th>
<th>Value</th>
<th>Normal ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning plasma cortisol (µg/dL)</td>
<td>0.11</td>
<td>11 - 22</td>
</tr>
<tr>
<td>Morning plasma Adrenocorticotrop Hormone ACTH (pg/mL)</td>
<td>1</td>
<td>6-65</td>
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Figure 1: Red stria at the level of breasts, thorax and abdomen.

Figure 2: Red stria at the level of axils, upper arms, and thorax.

Figure 3: The abdomen after one year from stopping glucocorticoid cream: the red stria became pale and the patient lost weight.
one year she totally lost 30 kg with persistent white stria [Figure 3].

This case highlights the importance of health care and education in using daily products.

References
