Cushing Syndrome VS. Metabolic Syndrome

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CASE

Female, born on 12/11/1978, referred to us by cardiologist and psychiatrist due to stigma of Cushing’s Syndrome and/or Metabolic Syndrome and mental illness as depression. Family history: father cardiac arrhythmia, mother benign multiple colloid thyroid nodules, 4 siblings (1 died). Her husband is fine. One daughter born on 1/19/2010 is fine. Late onset ofamenorrh. at 18 but it was induced by oral HR. She was diagnosed as PCOS, her pregnancy with GD, preeclampsia, NARL, thyroid nodules. After cesarean section lactation was scant. She complains of11 weight gain, moon face, abdominal obesity, cervical hump, acanthosis nigricans, barbel hirsutism, mother-of-pearl abdominal and chest striae, high blood pressure, high blood sugar, slimming inferior extremity.

TESTS

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<td>Cortisol a.m. 21.26 ug/dl (NR: 6.2-19.4 ug/dl) OGTT basal 144, 1h 331, 2hs 316, 3hs 227 mg/dl, HbaA1c 7.9%, CRP 12. normal lipid profile, 24hs urinary cortisol 133.5 (NR12.9-253 ug/24h) (11/18/2014) basal blood glucose 158, 2hs pp glucose 389.1 Chest X ray nil result, a.m. Cortisol 5.7 (NR:5.5-20 ug/dl) p.m. Cortisol 2.35 (NR:2.0-10.0 ug/dl) PRL 5.8 (NR:3.4-30.9 ng/ml) TSH 1.57 (NR: 0.38-4.7 uli/uL)</td>
<td>12/3/2014</td>
<td>10 Abdominal MRI nl 2/4/2015 Cortisol, Salivary 0.9 (NR:23 hs -0.09) (2/5/2015) Cortisol, Salivary 0.07 (NR:0.09 mcg/dl) (2/6/2015) Cortisol Salivary 0.06 (NR:0.09 mcg/dl) (all at 23 hs) Basal Cortisol 8.45 (NR:5.25 ug/dl) (3/3/2015) basal blood glucose 163 (NR:60-100 mg/dl) basal insulin 39.6 (NR:0.0-29.1 mIU/ml) 2 hs pp blood glucose 221.4 (NR:140 mg/dl) 2hs pp insulin 298 (mIU/ml) basal C peptide 7.19 (NR:0.9-7.1 ng/mL) 2hs pp C peptide 16.8 ng/mL creatinine 0.82 (NR:0.6-1.2 mg/dL) midnight plasma cortisol 2.23 (NR:2.5-12.5 ug/dl)1/25/2015: Cortisol, free, Urine 70.9 mcg/24h (NR:4.0-50.0)</td>
<td>4/6/2015</td>
<td>10BHepatitis MI+gadolinium normal limit 6/1/2016/ 1 mg DST basal Cortisol 8.06 ug/dl Cortisol 8hs after 1 mg dx 1.10 ug/dl basal blood glucose 162.6 (NR:60-100 mg/dl) basal insulin 40.6 (NR:0.0-29.1 mIU/ml) 2hs pp blood glucose 305.2 (NR:140-300 mg/dl) 2hs pp insulin 233.0 mIU/ml Cortisol, Salivary 0.04 (NR:23 h -0.09 mcg/dl) Creatinine, 24-h urine 2.16 (NR:0.63-3.50 g/24h) Cortisol free, 24 hr urine 63.6 (NR:4.0-50 mcg/24h)</td>
<td>6/21/2016</td>
<td>2.1x1.2 cm Thyroid nodule biopsy shows microfocal lesion with cytoplasmic atypia as a follicular neoplasia (Bethesda IV)</td>
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CONCLUSIONS

This case represents a clinical challenge for any physician. The obvious physical aspect of the patient makes a clear idea of the Cushing’s Syndrome, but we have only two tests in favour: 24 hs urinary free Cortisol twice (1/25/2015 & 6/6/2016). Pituitary and adrenal gland images are normal, the metabolic status is similar for both disorders as Diabetes and high blood pressure, finally we conclude that it is more prense to think that the case involves a severe Metabolic Syndrome more than a Cushing.

REFERENCES
