CLINICAL NONSECRETING PITUITARY MACROADENOMA MANAGED BY CABERGOLINE: ANYBODY, ANYTIME?

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Pathologic antecedents:
- Pituitary macroadenoma (37/45/47mm) with compressive syndrome – left cecity (June 2014)
- Partial ablation of the adenoma (July 2014) – with IHH prolactin, LTH, FSH, TSH and GH staining
- Iatrogenic partial pituitary insufficiency – ACTH, TSH (substituted) (July 2014)

M. G., 16 years and 3 months old male

Motives of admission
- Short stature (-3.5 SD) in the context of the iatrogenic pituitary insufficiency

Clinically:
- Short stature (149.9 cm, -3.5 DS)
- Underweight (BMI=17.57 kg/m2 -5th percentile)
- 18.6 kg/m2
- BP=145/90 mmHg (orthostatic and clinostatic)
- Tanner stage P3C3
- Left temporal hemianopia

Biologically:

<table>
<thead>
<tr>
<th>Hormone</th>
<th>Value</th>
<th>Normal value</th>
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<tbody>
<tr>
<td>TSH</td>
<td>0.700 mU/ml</td>
<td>(0.34-6.1)</td>
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<tr>
<td>FT4</td>
<td>0.977 ng/dl</td>
<td>(0.89-1.76)</td>
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<tr>
<td>Testosterone</td>
<td>335 ng/dl</td>
<td>(223-1108)</td>
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<tr>
<td>IGF1</td>
<td>56.9 ng/ml</td>
<td>(136-285)</td>
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<tr>
<td>ACTH</td>
<td>12.1 pg/ml</td>
<td>(7.2-63.3)</td>
</tr>
<tr>
<td>Cortisol (BAM)</td>
<td>22.6 ug/dl</td>
<td>(5-25)</td>
</tr>
<tr>
<td>GH (base)</td>
<td>0.191 ng/ml</td>
<td></td>
</tr>
<tr>
<td>GH (maximum value in Insulin Induced Hypoglicemia)</td>
<td>0.179 ng/ml</td>
<td>(&gt;10)</td>
</tr>
<tr>
<td>IPTH</td>
<td>13.2 pg/ml</td>
<td>(15-65)</td>
</tr>
<tr>
<td>PRL</td>
<td>2920 u/dl/ml</td>
<td>(&lt;520)</td>
</tr>
</tbody>
</table>

Pituitary MRI: adenoma of 3.2/3.56/3.4 cm, which invades the sphenoid sinus, the right cavernous sinus, it has contact with the right internal carotid artery and pushes the left internal carotid and also with the distal segment of the optic nerves

Hand X-ray: a bone age of 16 years
Visual field: left temporal hemianopia

Diagnosis
Non secreting pituitary macroadenoma with compressive syndrome
Partial pituitary insufficiency - TSH, ACTH, GH
Short stature due to the GH deficiency
Left temporal hemianopia

Treatment:
- Indication for surgery

But – Refuse of family

- Cabergoline - started with a dose of 1 mg/week and progressively increased the dosage up to 3 mg/week, with visual field evaluation every 1-2 months and MRI after 6 months

After 6 months:
- Clinically: nausea and weight loss (1 kg in the last month)
- Visual field: bilateral hemianopia - stationary MRI

Conclusion: Cabergoline treatment of nonsecreting tumors with IHH staining for D2 receptors is a new strategy with optimistic results in recent studies; however, close monitoring is mandatory during the treatment in order to identify non responders and assure an individualized therapeutic decision.

Surgery